

# **Dravidian Comparative Phonology**



# DRAVIDIAN COMPARATIVE PHONOLOGY

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## *Foreword*

Dr. P.S. Subrahmanyam's book *Dravidian Comparative Phonology* is a welcome addition to our ever increasing scientific literature on Comparative Dravidian. Since Zvelebil's Comparative Dravidian Phonology (1970), there have appeared a large number of publications bearing on comparative phonology which Dr. Subrahmanyam has rightly covered in this treatise. This book can, therefore, be claimed as the most comprehensive and up-to-date account of comparative Dravidian phonology.

Subrahmanyam has unravelled many a phonological problem involving divergent developments of Toda vowels and consonants during the last few years (see § 1.22). His Doctoral thesis, which he published with extensive revisions in 1971 under the title *Dravidian Verb Morphology*, is a pioneering work on comparative morphology of Dravidian. His dedicated research in Comparative Dravidian has given him a respectable place in the world of Dravidian scholarship.

Emeneau's *Sketch* (1970) is still the best introduction to a new entrant to the field, since it does not deal with any controversial issues. Even Zvelebil's book keeps controversies to a minimum. But Subrahmanyam's book raises certain points, for the first time, without presenting arguments fully representing all sides. It is now widely accepted among the Dravidian scholars that the Proto-Dravidian roots are all monosyllables of the type (C)V(:) or (C)V(:) C. Dr. Subrahmanyam proposes, in this work, two other types (C)VCC and (C)V:CC,

e.g. \**tapp* ‘to err’ (*DED* 2498), \**namp* ‘to believe’ (*DED* 2975), \**ka:kk-ay* ‘crow’ (*DED* 1197) (§ 2.2.6; pp. 19–22). If the occurrence of reflexes for all phonemes of the reconstructed form in all or most of the descendant languages is the main criterion (p. 20), then the entire form \**ka:kkay* has to be treated as the root for *DED* 1197 (p. 22). Also notice Subrahmanyam accepts the observations of Krishnamurti on ‘inner derivation’ (§ 2.4, pp. 33–35) which give the reasoning for the fusion of certain formatives with roots at a deeper chronological level (p. 34). Similarly, his position on reconstructing two nasals \**n* (dental) and \**u* (alveolar) for Proto-Dravidian (§§ 3.2, 30) is not defensible in terms of comparative evidence. One would feel that Dr. Subrahmanyam had not formulated rules using distinctive features, without discussing alternative matrices of distinctive features suitable for the Dravidian languages (pp. 251, 255, 260). It would also be difficult to accept the statement that the change(s) of PDr. \**i*, \**u* to \**e*, \**o* in the Tamil-Kannada Subgroup and in the Telugu-Gondi Subgroup as independent and mutually unrelated developments (§ 15.1, p.210, § 15.2.1, p.221). Note that PSDr. \**cow-ar* (< PDr. \**cup+ar*) ‘salt’, explains the forms both in SDr I (Ta.-Ka. Subgroup) and SDr. II (Te.-Go. Subgroup). His casual rejection of the explanation of Krishnamurti to account for the complicated vowel-lowering rule of Kui-Kuvi (*e*:, *o*: > *a*:) will not easily pass without more sophisticated arguments. There is more than what meets the eye in the mechanism of certain complex sound changes in language (cf. Labov, Yaeger & Steiner, *A quantitative Study of Sound Change in Progress* (NSF GS-3287), pp. 194–205 for a discussion of the riddle of the Great Vowel Shift in English). Dr. Subrahmanyam has a long chapter on quantitative variation (§ 14, pp. 158–200) which embodies a bitter controversy that he had with Dr. G, Sambasiva Rao, but in

a standard text, so much space need not be devoted to one issue. Still, the last word is yet to be said of this controversy.

Dr. Subrahmanyam was my pupil in the formative years of his exposure to Dravidian linguistics. It is perfectly within the Indian tradition for teachers and pupils to contradict each other's point of view and that was how true knowledge has grown on this soil in many branches of Arts and Science. It was in this spirit of inquiry and accommodation that I have pointed out some of the controversial issues in Dr. Subrahmanyam's work. I am indeed proud of Dr. Subrahmanyam's accomplishments in the field of Comparative Dravidian.

I am happy to commend this important contribution to all scholars of Dravidian and Indian linguistics.

*Bh. Krishnamurti*



## Preface

The Centre for Advanced Study in Linguistics at Annamalai University published, since its inception, a number of works on Dravidian Linguistics. Among these, about ten are devoted to the study of Dravidian Comparative Grammar. For the comparative study of any linguistic family, work on its comparative phonology forms the basis. In Dravidian, there have been significant developments in the study of comparative phonology in recent times. Students and research scholars working in Dravidian are in need of a standard work that gives basic information on comparative phonology incorporating all the recent developments in the field. Dr. P. S. Subrahmanyam's *Dravidian Comparative Phonology* fulfils such a need. In addition to being a textbook it also provides solutions for some of the vexing problems for the first time. I, therefore, hope that this will be a welcome addition to the works on Dravidian Comparative Grammar. I congratulate Dr. P. S. Subrahmanyam for his valuable research on Dravidian and several important publications.

ANAMALAINAGAR

23—9—83

S. AGESTHIALINGOM

DIRECTOR

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# **I. INTRODUCTORY**



## *Introduction*

This book has been written with the intention of providing a textbook on Dravidian Comparative Phonology. Until now two books on this subject are available and this makes it necessary to explain the need for a third book. Professor M.B. Emeneau's *Dravidian Comparative Phonology : A Sketch* summarised the findings in the field upto 1970 but, as its title suggests, its treatment is sketchy and readers had to refer the original publications scattered in different journals. Kamil Zvelebil's *Comparative Dravidian Phonology*, also published in 1970, is based to a great extent on Emeneau's work just mentioned. This book, of course, contains elaborate discussions and ample illustrations. The study of the subject has progressed considerably after the publication of these two works. The desire to write a textbook incorporating the recent developments was strengthened by the success achieved in solving a long standing problem of Toda comparative phonology [see Subrahmanyam 1976]. At this point, it became clear that the proposed work will be of more value if it also concentrates on some of the yet unsolved and tantalizing problems instead of being a mere textbook that summarizes only the facts hitherto known. Consequently,

some more problems posed by Toda and Kota were studied in depth with a fair amount of success. These reasons, I hope, justify the appearance of a third book on the subject. This should not be taken to mean that unsolved problems do not still remain. Wherever definite solutions could not be arrived at, the problems have been identified and the discussions in this work may serve as the basis for further research on such dark aspects. The present work, thus, turned out not only to be a textbook in the main but also a research work presenting solutions for the first time on certain aspects. The experience of teaching the subject for about two decades at the Annamalai University and in a few Summer Institutes proved to be of great value in the preparation of this work.

Now it is my pleasant duty to acknowledge the help and encouragement received from several scholars. I wish to express my sincere thanks to Professor M. B. Emeneau who read most of my papers on Dravidian Comparative Grammar before publication and encouraged me by giving very useful suggestions through correspondence. It has always been a pleasure to exchange notes with such an outstanding scholar. But for his amazing accuracy in recording the phonetically difficult Toda material, the rules for the various Toda developments proposed here could not have been framed. I am indebted to him not only for the Toda and the Kota materials included by him in the *DED(S)*, which I have used in the course of preparation of this work, but also for supplying me copies of his own works and others which would have been otherwise inaccessible to me.

My heartfelt thanks are due also to Professor S. Agesthiaingom, who, apart from various acts of kindness, encouraged me to write this book and took keen interest in getting it published. I am grateful to Professor Bh. Krishnamurti,

who first introduced me to this subject, for helping me to sharpen my ideas on several aspects of Dravidian Comparative Grammar through stimulating discussions whenever we met. My sincere thanks are also due to him for the nice foreword he gave to this book in the midst of his various preoccupations.

The following research scholars, Dr. K.V. Jalajakshi, Dr. K.L.N. Sarma, C. Rama Subbiah Sarma, K. Thomasaiah and my daughter Uma Devi assisted me in the preparation of the printer's copy and in proof reading. Grateful acknowledgements are due to the authorities of the Annamalai University for having included this book as one of the publications of the University. M/s. Abirami Printers, Chidambaram must be thanked for printing the book with utmost care.

Annamalainagar  
21-9-88

*P. S. Subrahmanyam*



## *A note on the Composition of the Dravidian Family*

It is generally assumed that Proto-Dravidian, which is the parent language of the present day Dravidian languages, first disintegrated into three divisions or subgroups. They are South Dravidian, Central Dravidian and North Dravidian. The proto languages of these are called Proto-South Dravidian, Proto-Central Dravidian and Proto-North Dravidian respectively. In course of time, these three proto languages transformed into the present day twenty one languages by a gradual process of separation. This process will be briefly sketched below. Because the Central Dravidian subgroup has the largest number of languages in it, it is reasonable to assume that the process of separation started much earlier in it than that in the other two subgroups.

Proto-South Dravidian disintegrated in successive stages into the following seven languages: 1. Tamil, 2. Malayalam, 3. Ko $\ddot{d}$ agu, 4. Kota, 5. Toda, 6. Kannada and 7. Tu $\ddot{u}$ . Tu $\ddot{u}$  seems to have separated first from this group and the parent speech of the rest of the languages, i.e. Proto-Tamil-Kannada, remained undivided for some time. This later split into the two branches, Proto-Tamil-Malayalam-Ko $\ddot{d}$ agu-Kota-Toda and Kannada (Ba $\ddot{d}$ aga is a dialect of Kannada). The former branch later got separated into Proto-Tamil-Malayalam-Ko $\ddot{d}$ agu and Proto-Kota-Toda. Ko $\ddot{d}$ agu seems to have separated first from Proto-Tamil-Malayalam-Ko $\ddot{d}$ agu and later (between the 5th and the 10th centuries A.D.) Proto-Tamil-Malayalam (or Old Tamil) got separated into later Tamil and Malayalam. Proto-Kota-Toda yielded the present day Kota and Toda.

Proto-Central Dravidian is the source for the following eleven languages: 1. Telugu, 2. Gon $\ddot{d}$ i, 3. Kon $\ddot{d}$ a, 4. Pengo, 5. Manda, 6. Kui, 7. Kuwi, 8. Kolami, (Naikyi is a dialect of it), 9. Naiki (Chanda), 10. Parji and 11. Gadba. The

process of disintegration involved in this seems to be as follows. Proto-Central Dravidian first got separated into the two blocks, Proto-Telugu-Kuwi and Proto-Kolami-Parji (the former is the source for the languages from Telugu to Kuwi and the latter for the languages, Kolami, Naiki, Parji and Gadba).<sup>1</sup>

From Proto-Telugu-Kuwi, Telugu branched off first and the rest of the languages remained together as Proto-Gondi-Kuwi. Proto-Gondi-Kuwi separated into Gondi (Koya is one of its major dialects) and Proto-Kondu-Kuwi; the latter got separated into Kondu and Proto-Pengo-Kuwi at a subsequent stage. Proto-Pengo-Kuwi later split into the two proto languages, Proto-Pengo-Manda and Proto-Kui-Kuwi. The former is the source for Pengo and the latter for Kui and Kuwi.

Proto-Kolami-Parji first split into Proto-Kolami-Naiki and Proto-Parji-Gadba. The former is the source for Kolami and Naiki and the latter for Parji and Gadba (Ollari and Salur dialects).

Proto-North Dravidian is the source for the following three languages: 1. Kurux, 2. Malto and 3. Brahui. Brahui separated from this stock at a quite early time and the remaining branch, i.e. Proto-Kurux-Malto split into Kurux and Malto at a comparatively recent date.<sup>2</sup>

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1. Recently Bh. Krishnamurti proposed the hypothesis that these two groups are independent branches of Proto-Dravidian derived directly from it and, as such, they do not have a common period of development. This has to be tested by further research.

2 The above summary account of the disintegration of the Dravidian linguistic family is based on the detailed discussion on this topic in "Subgroups in Dravidian" (Subrahmanyam, P.S. 1971: 505-531). The exact position of Irula and a few more recently discovered speeches like Koraga and Kurumba within the family is not clear at present.

## *Abbreviations*

PDr.	Proto-Dravidian	
PSDr.	Proto-South Dravidian	
	Ta.	Tamil
	Ma.	Malayalam
	Ko <sup>d</sup> .	Kodagu
	Ko.	Kota
	To.	Toda
	Ka.	Kannada
	Tu.	Tulu
PCDr.	Proto-Central Dravidian	
	Te.	Telugu
	Go.	Gondi
	Konda	Konda
	Pe.	Pengo
	Mand.	Manda
	Kui	Kui
	Kuwi	Kuwi
	Kol.	Kolami
	Nk.	Naikyi dialect of Kolami
	Nk. (Ch.)	Naiki (Chanda)
	Pa.	Parji
	Ga. (Oll.)	Gadba (Ollari dialect)
	Ga.(S)	Gadba (Salur dialect)
PNDr.	Proto-North Dravidian	
	Ku <sup>r</sup> .	Kurux
	Malt.	Malto
	Br.	Brahui

*DED* = Burrow, T. and Emeneau, M.B. 1961

*DBIA* = Burrow, T. and Emeneau, M.B. 1962

*DEDS* = Burrow, T. and Emeneau, M.B. 1968

*DEN* = Burrow, T. and Emeneau, M.B. 1972

(The sigilla used for the dialects or the sources of the various languages are the same as those used in the above works).

## *Notes on Transcription*

Length of vowel is uniformly represented by /:/ in the case of all languages.

- i High back unrounded vowel (Toda, Kodagu and Tu $\ddot{u}$ )
- ē Mid back unrounded vowel (Kodagu)
- ii High front rounded vowel (Toda)
- ō Mid central rounded vowel (Toda)
- E Lower-mid front unrounded vowel (Tu $\ddot{u}$ )
- t Voiceless alveolar stop (Kota and Toda)
- d Voiced alveolar stop (Kota and Toda)
- q Voiceless post-velar stop (Malto)
- ? or ' Glottal stop
- c Voiceless palatal affricate (in languages other than Toda; but post-dental in Toda; see p. 325 for Tamil and Telugu)
- z, Voiced post-dental affricate (Toda)
- <sup>v</sup>c Voiceless palatal affricate (Toda)
- n Dental nasal (in Tamil; but alveolar in others except before a dental plosive)
- <sup>v</sup>n Alveolar nasal (Tamil)
- s Voiceless apico-alveolar sibilant with flattened body of tongue (Toda)
- <sup>v</sup>s Voiceless apico-alveolar palatalized sibilant (Toda)
- <sup>r</sup>s Voiceless retroflex sibilant (Toda)
- θ Voiceless inter-dental fricative (Toda)

- l* Voiced retroflex fricative (Tamil, Malayalam, Kannada and inscriptional Telugu)
- x* Voiceless velar fricative (Toda, Kurukshetra and Brahui)
- G* Voiced velar fricative (Malto and Brahui)
- L* Voiceless alveolar lateral (Toda and Brahui)
- L̤* Voiceless retroflex lateral (Toda)
- R* Voiceless alveolar trill (Konda)
- r* Voiced alveolar trill (Tamil, Malayalam, Toda, Kannada, Telugu and Konda)
- r̤* Voiced retroflex flap (in many languages but retroflex trill in Toda; its phonetic value in Parji is not yet clear)
- r̥* Voiced post-velar fricative (in Hill-Maria dialect of Gondi; but vocalic *r* in Sanskrit)

(Note: On p. 347 (line 26) for *r* read *r̤*; (line 27) for *g̤* read *r̥*)

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## Dravidian Comparative Phonology - A Brief History

1.1. Robert A. Caldwell (later Bishop Caldwell) was the first scholar to write the comparative grammar of the Dravidian languages and the first edition of his work was published in 1856. Earlier to him, Francis W. Ellis (1780-1819) recognised that Tamil, Malayalam, Ko<sup>ṭ</sup>agu, Kannada, Tu<sup>ṇ</sup>u, Telugu and even Malto belong to one and the same family which was called by him "the dialects of Southern India" and which was later given the name "Dravidian" by Caldwell.<sup>1</sup> Ellis published his thesis as "Note to the introduction" of A. D. Campbell's *A Grammar of the Telogoo language* (Madras, 1816); Ellis's essay was reprinted with an editorial note by N. Venkata Rao in *Annals of Oriental Research* 11 (1953-54): 1-8; 12 (1954-55): 1-35. Although Ellis collected

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1. Ellis's purpose in writing this article was to show that Tamil, Telugu, Kannada, Malayalam and the other languages have no genetic connection with Sanskrit and that they form a distinct linguistic family. He says: "It is the intent of the following observations to shew that the statements contained in the preceding quotations are not correct; that neither the

a few cognates and some grammatical resemblances in these languages in his short note, it was Caldwell who first gave a full book-length treatment to Dravidian comparative grammar. Caldwell added Toda, Kota, Gondi, Kui, Kurukh and Brahui to Ellis's list of languages.<sup>2</sup> He discussed the phonology of the Dravidian languages in about seventy pages. In addition to describing the phonetic nature of the sounds in the various languages (including the variations within a particular language), he observed the phonetic correspondences among the sister languages like the following:

- (i) Ta. *ai* : Ma. *a* : Ka.*e* : Te. *a*;
- (ii) Ta. Ma. *c-* : Ka.*k-* : Te. *c-*;

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Tamil, the Telugu, nor any of their cognate dialects are derivations from the Sanscrit; that the latter, however it may contribute to their polish, is not necessary for their existence; and that they form a distinct family of languages, with which the Sanscrit has, in later times especially, intermixed, but with which it has no radical connexion." The quotations referred to in the above paragraph are from the works of Dr. Carey, Dr. Wilkins and of Mr. Colebrooke, all of whom thought that Tamil, Telugu, etc. are derived from Sanskrit.

It must be emphasized here that the native grammarians of the four literary languages have long ago recognized the fact that these languages are not wholly derived from Sanskrit. All of them have kept separate the *desya* (native) words from words derived from Sanskrit (or Pra:krit). Ellis and Caldwell went one step ahead of them in establishing that these languages are interrelated and thus constitute a linguistic family.

2. Caldwell (1956:39) noted that Brahui "contains not only some dravidian words, but a considerable infusion of distinctively Dravidian forms and idioms." But still he said: "I have not included, however, the Brahui in the list of Dravidian languages which are to be subjected to systematic comparison (though I shall refer to it occasionally for illustration), because the Dravidian element contained in it bears but a small proportion to the rest of its component elements."

- (iii) Most of the languages *p-* : Mod. Ka. *h-*;
- (iv) Ta.Ma.*l* : Ka.*l* : Te. *ɖ* (also *ɸ* in Mod.Te.): Tu.*r*;  
and even

(v) the loss of initial *s-* of Sanskrit words in Tamil and other languages. He noted the importance of such "dialectic interchanges" for etymological studies.<sup>3</sup> However, in most of the cases, he could not give the precise conditionings for more than one reflex of one and the same phoneme of the proto-language in a particular language as in the case of Ta. *k-*, *c-* : PDr. \**k-*. He was content to point out different developments of one and the same original phoneme in a language and provided a few examples and left the matter there. In the case of the correspondence, Ta. *ai*, Ma.*a*, Ka.*e*, Te.*a*, he seems to think for some unknown reason, that Ma. and Te. *a* is the original one and that Ta. *ai* (and Ka.*e*) is weakened from it. It would be wrong on our part to question the capacity of Caldwell because of such lapses in his treatment of Dravidian phonology. When Caldwell wrote his book linguistics was in its infancy and linguists were yet to realize the important fact that sound change is regular. The comparative study of the Indo-European languages also did not make a headway at that time. Therefore we must appreciate the conditions under which Caldwell laboured and must be grateful to him for at least raising the problems and hinting at the solutions for them with his limited materials and theoretical knowledge. Also Caldwell has analysed bases into roots and "formative suffixes" or "particles of specialization" by

3. He says (1956 : 151): "These dialectic interchanges will be found to throw much light on the Dravidian laws of sound, whilst they enable us to identify many words and inflectional forms contained in the various dialects, which appear at first sight to be unconnected, but which are in reality the same".

comparing phonetically and semantically related words and he even observed changes in root vowels. (see also § 2-3).

1.2. Caldwell's work was not followed up by any scholar until the beginning of the 20th century. K. V. Subbaiah [1909, 1910-1911] dealt with some of the important problems in Dravidian phonology in greater detail than Caldwell did, but, unfortunately, he could not arrive at correct solutions. Some of his conclusions, which are later disproved are : [i] the PDr. sound \*æ:, which he reconstructed to account for the correspondence, Ta.Ma. *a*: : Te. *e*: in some words; [ii] PDr. did not have exclusive and inclusive plural in the 1st person and [iii] the hypothesis of accent shift from the first syllable to the second in the Central Dravidian languages. Nevertheless, his work shows that he collected a lot of cognates and that he had the capacity to think originally.

1.3. Special mention must be made of L. V. Ramaswami Aiyar who contributed to all aspects of Dravidian philology, including comparative phonology, comparative morphology, etymological study, study of historical records and fieldwork [on Tuzu]. He published over a hundred articles and books during the period 1925-50. Sandhi in Dravidian languages, was discussed in great detail in his article entitled "Dravidic sandhi" (1934-35). In his article of 1937, the development of PDr. \**t* in the various languages was discussed in detail. He [1935] has also discussed the phonetic nature of the sound *l* in Tamil and Malayalam and traced the development of PDr. \**l* in the daughter languages. The descriptive and the comparative aspects of the phonology of Malayalam were discussed in his work of 1937-39 and his 1931-32b article deals with the loss of the vowel of the initial syllable and metathesis in Dravidian. He also collected material on Tuzu through fieldwork and analyzed its phonology both descriptively

and comparatively in his 1936b article. Ramaswami Aiyar was the first scholar to take into consideration the linguistic usages in the ancient records of the four literary languages and the statements of traditional grammarians in the study of Dravidian comparative grammar. We find that he has collected a number of cognate words from various languages in his papers devoted to the study of comparative phonology.

1.4. Pierre Meile [1943-45] pointed out the loss of PDr. \*c-in South Dravidian although this matter was later discussed more thoroughly by T. Burrow in one of his articles.

1. 5. During the period 1919-1938, E. H. Tuttle discussed several phonological and morphological problems in Dravidian. His monograph entitled "Dravidian Developments" [1930] summarizes his studies upto that time. Since he did not have a first hand knowledge of any one of the Dravidian languages, he could not understand the basic nature of these languages. In many cases, he was unable to distinguish between cognates and synonyms. That is the reason why he reconstructed such unacceptable clusters as \*sn- in the supposed original word for Ka.no:du : Te.cu:du 'to see' [which are not cognates] and \*stl - in the supposed original word for Ta. cikku, Ka.sikku, silku, Tu.tikk- 'to be caught'. However, he observed many of the phonetic correspondences among the languages like Ta.i, u : Ka. Te. e, o [before -a] and characteristic changes in particular languages, like the change of mid vowels to high vowels before a high vowel in Kannada, the loss of a nasal except after an initial short vowel in Kannada, "stress-displacement" in early Telugu, Gondi and Kui and the changes of \*e and \*o to Brahui a. But most of the reconstructions given by him like \*asan 'he', \*e:n 'I', \*e:m 'we [excl.]', \*i:s 'you [sg.]' and \*isir 'you [pl.]' are unacceptable. He noted the closeness of Gondi, Kui, Kuvi, Parji, Kolami

and "the basis of Tulu" and suggested that this group may be called "the central division" for linguistic reasons.

1.6. Sir Denys Bray, in his introductory remarks to both the publications of 1909 and 1934 produced evidence to prove that Brahui is basically a Dravidian language. He [1934:17-19] has pointed out the change of PDr. \**k*- to Kur. *kh*- Malt. *q*- and Br. *kh*- and of PDr \**v*- to Kur. Malt. Br. *b*- and listed words common to Brahui, Kurukh and Malto in order to establish the close relationship of these three languages.

1.7. The two outstanding and senior most scholars of the present day, T. Burrow of Oxford University and M.B. Emeneau of the University of California, Berkeley, initiated the truly scientific study of Dravidian comparative grammar in 1930s. Burrow published a series of articles in *BSOAS* [vols. 9-12] which proved to be the foundation for a systematic study of Dravidian comparative phonology [these articles alongwith some others were reprinted in a book form by Annamalai University in 1968]. In this, he made a lucid and thorough study of important problems like the question of initial voiced stops in Dravidian, the alternation *i/e* and *u/o* in South Dravidian and the various developments of the Proto-Dravidian phonemes, \**k*, \**c*, \**y* and \**ñ* in the daughter languages. Burrow's analysis of the various problems is thoroughly scientific and he gives the precise conditioning factors for the change of a proto-sound into more than one sound in a daughter language. The residual material was also properly accounted for by him. Where necessary, he also pointed out the inadequacies in the statements of earlier scholars. In his recent publications [as co-author with S. Bhattacharya] on many of the Central Dravidian tribal languages like Parji (1953), Pengo (1970), Gondi (1960), Kuvi (1963) and the Kuttia dialect of Kui (1961), he observed the characteristic

developments of some of the PDr. sounds in those languages, especially of \*c, \*l, \*r, \*ɻ. In his paper of 1968, Burrow concludes that PDr. \*l is simply lost in many cases in Kurukh and Malto and that the earlier view that c/s was its reflex in these languages is not justified.

1.8. A large number of papers and books of M.B. Emeneau deal with Dravidian comparative phonology. In his 1953 article, he showed that PDr. \*c- develops to Toda t- and the Toda words that show s- are borrowings. He [1961b] proved that PDr. \*c- changes into k- before \*u, \*u:, \*e and \*e: in the North Dravidian languages, Kurukh, Malto and Brahui. In his Kolami book [1955], Chapter X - comparative position of Kolami, he traced the development of a number of PDr. sounds in Kolami as well as in the other languages to determine the place of Kolami within the Dravidian family. In his book of 1962, he discussed the development of Brahui sounds, especially vowels, from PDr. sounds. His papers on Toda [1958], Ko<sup>z</sup>agu vowels [1970b], vowel shift in Kota [1969a], South Dravidian languages [1967b] and on the Development of PDr. \*l in Ko<sup>z</sup>agu and Brahui [1971] make a detailed analysis of the phonological problems involved and thereby contribute significantly to the growth of Dravidian comparative phonology. His monograph, *Dravidian comparative phonology: a sketch* [1970a] summarizes the developments in comparative phonology upto that time and includes the findings of Emeneau himself as well as those of other scholars.

1.9. Burrow and Emeneau in collaboration compiled *DED* [1961], *DEDS* [1968] and *DEN* [1972] which contain cognates in all the available Dravidian languages and thereby constitute indispensable tools for any Dravidianist. The undertaking of the etymological work must have been preceded by a preliminary survey of the development of each proto-sound in each language and the result of that survey was given in *DED*,

pp. xii-xiii as the table of phonetic correspondences. As already mentioned, these works form the basis for further detailed studies in Dravidian comparative grammar. They have already given a lot of impetus to Dravidian scholars and they are responsible to a great extent for the rapid growth of this discipline in recent years. In these works, Emeneau included the lexical items of Toda, Kota, Ko $\ddot{d}$ agu and Kolami, the languages on which he worked and Burrow similarly included the lexical items of Parji, Ollari, Gadba, Naik $\ddot{y}$ i, Kui, Kuvi, Pengo and Manda—the languages on which he did fieldwork in collaboration with Sudhibhushan Bhattacharya. The two supplements include materials that have been published since 1961.

1.10. Sudhibhushan Bhattacharya [1956 : 15-17] briefly surveyed the development of some PDr. sounds in Ollari.

1.11. Bhadriraju Krishnamurti is one of the few outstanding scholars who have contributed and are still contributing to the development of Dravidian comparative phonology by their insightful and penetrating studies. His *Telugu verbal bases* [1961] presents a comparative phonology of Dravidian [pp. 6-132], keeping Telugu as the centre of attention. Some of the problems treated originally under phonology include the question of voiced stops in Dravidian, the development of initial consonant clusters and *d-*, *r-*, *t-* and *l-* through metathesis and vowel contraction in Telugu and the Gondi-Kuvi group of languages [§§ 1.121-159] and several developments resulting from the loss of vowels in unaccented syllables [§§ 1.180ff., 2.9-21]. In the second chapter of this work entitled, "Composition of the Verbal Bases [Etymological Analysis]" he analysed the Telugu verbal bases into roots and derivative suffixes both descriptively and comparatively and attempted to explain the origin of the Telugu derivative suffixes wherever possible. In this study, which is a continua-

tion of Caldwell's, he critically evaluated the views of the former. In his 1955 article, he showed that verbal roots of the type (C)V:C- shortened the vowel before a derivative suffix beginning with a vowel. In another paper [1958a], he discussed the reflexes of PDr. \**l* [which he prefers to represent as \**z*] in each of the Dravidian languages. In his 1958b article, he reexamined the problem of *i/e* and *u/o* alternation, which was satisfactorily explained by Burrow already and suggested that PDr. \**i* and \**e* merged into \**e* and PDr. \**u* and \**o* merged into \**o* before a derivative suffix beginning with \*-*a* in Proto-South Dravidian. He [1969a] proved conclusively that PDr. \**n-* changes to *d-* in Brahui before a front vowel. In a recent paper [1978b] entitled, "On diachronic and synchronic rules in phonology : a case from Parji" he succeeded in finding the conditioning factors for the development of PDr. \**a>a, e and \*a:>a:, e:* in Parji [the change to *e* and *e:* occurs before original alveolar consonants]. In another paper (1978a) entitled "Areal and lexical diffusion of sound change : evidence from Dravidian", he discussed in detail the shifting of alveolar and retroflex consonants to the position before the root vowel in the Telugu-Kuvi subgroup (he calls this change "apical displacement" instead of the more common name "metathesis and vowel contraction"). In his review (1976a) of Kamil Zvelebil (1970), he made insightful remarks on some phonological developments of some of the central languages. His survey article, "Comparative Dravidian studies" (1969b) presents a lucid and critical survey of all aspects of comparative Dravidian studies upto that time.

1.12. Kamil Zvelebil's *Comparative Dravidian Phonology* (1970) is based mainly on Emeneau's Sketch (1970a) but, unlike the latter, it contains detailed discussions on problems and a readable summary of the results of research by various scholars upto that time. Although it does not solve any of

the problems that were not solved upto that time, it gives a lot of new information on Tamil dialects and inscriptions and points out the areas that require further research. Zvelebil (1971, also 1970 : 193-194) explains the origin of the additional vowels *i*, *ü*, *ë*, and *ö* in Iruṇa. In another article (1972b), he discusses the problem of initial voiced plosives in Dravidian. Zvelebil (1967, also 1970: 184-187) proposes a new morphophonemic alternation, i.e.  $(C_1)V_1C_2C_2 : (C_1)V_1:C_2$  in Dravidian roots and explains the underlying principle in this and the other two alternations known earlier (see Chapter 14 for details).

1.13. D. N. Sankara Bhat (1966a) studied the development of PDr. \**t* and some other changes in Tuṇu. In another article (1970), he discussed in detail the development of PDr. \**k* in Kurukh.

1.14. V. I. Subramoniom (1968) discussed the problems involved in the reconstruction of PDr. nasal phonemes. He (1972) also proposed rules for the change or its absence of \*NP > NN in Malayalam.

1.15. S. V. Shanmugam (1972) presented valuable data from Old Tamil to show that the dental *n* and the alveolar *ñ* were separate phonemes in that stage of Tamil but concluded that they were not separate phonemes at the PDr. stage.

1.16. N. Kumaraswami Raja (1969a, b, 1980a) proposed that PDr. contained sequences of \*NPP to explain the correspondence of Ta. Ma. PP : Ka.Te. NP (not NB) which was unexplained by earlier scholars. This discovery, which is an outstanding one has been accepted by all the scholars in the field. In a recent article (1975), he studied the distribution of the unrounded *i* in Old Tamil and other related matters. His 1980b article deals with the developments of \*NP in Malayalam.

1.17. E. Annamalai (1968) shows that palatalization of PDr. \**k*- before a front vowel does not operate in onomatopoeic expressions in Tamil-Malayalam and Telugu.

1.18. G. Sambasiva Rao (1973, 1977) proposed that reduction of a long vowel or a long consonant of PDr. roots takes place before a vowel only when the derived word belongs to the same grammatical category as that of the original word (see the discussion in Chapter 15).

1.19. Martin Pfeiffer (1972) dealt with the historical phonology of Kurukh in an elaborate manner and made some new observations.

1.20. SP. Thinnappan (1976) discussed the problem of *ałapełtai* (extra-long vowel) in Old Tamil giving the views of early grammarians and commentators.

1.21. K. Balasubramanian (1976) discussed the problem of *a:ytam* in Old Tamil taking into account the views of traditional grammarians and those of the modern scholars on this problem.

1.22. P. S. Subrahmanyam (1964) noted the change, \**nt* > \**ñc* > *ñ* after a front vowel or *y* in Parji. He (1970) showed that the long vowel before *y* in Telugu bases resulted from an original short vowel through compensatory lengthening (see Chapter 15). In another article (1975, also 1977b), he proved that the reduction of a long vowel or a long consonant of Dravidian roots before a derivative syllable beginning with a vowel takes place regularly in verbal bases and trisyllabic nominal bases but it is very rare in disyllabic nominal bases. In his Gonđi book (1968a), he presented the outlines of Gonđi historical phonology. In his recent article (1980) entitled, "From Proto-Dravidian to Telugu", he traced each of the Telugu sounds to the corresponding sounds of PDr. During the course of the preparation of the

present book, he attempted to find solutions for some of the major unsolved problems in Dravidian comparative phonology especially those posed by Toda and Kota. Some of these findings have been published recently as articles. He (1976, 1977a) succeeded in finding the conditioning factors for the divergent developments of PDr. \**a* > *a*, *o*, PDr. \**a:* > *a:*, *o:* and of PDr. \**r* > *r*, *s*, *S*,  $\phi$  in Toda; he (1977c) also concluded that PDr. *l* > *L* (in verb bases that have \**rr* in the erstwhile past stem), *S* (otherwise) and ; that PDr. \**ɿ* > *L* in native Toda vocabulary and that most of the Toda words that contain *l* and *ɿ* are loans from other languages. His 1979 article is a summary of the study (presented here) of the developments of original high and mid vowels in Toda. All these findings are incorporated in the present work in the relevant sections.

## Root and Derivative Element

### 2.1. Basis for segmentation

2.1.1. The division of a nominal or verbal base into root and derivative element (or suffix) is very essential in the comparative study of any linguistic family. On a comparison of bases or words which are partially similar both in meaning and form to one another within one and the same Dravidian language or in the sister languages, it will be evident that only a portion at the beginning of them will be found common in all of them. This common portion consisting of two, three or rarely four sounds is called the root and the remaining portion which is dissimilar and follows the root is called the derivative element (or suffix). The following examples serve to illustrate this point.

- 1. Ta.      *at-u* 'to pound (as rice), kill, destroy'  
*at-i* 'to beat, strike', n, 'blow'  
*at-ar* 'to beat, strike'. n, 'troubling'
- Ma.      *at-i* 'to beat', n. 'blow'  
*at-ippu* 'printing, stamping'  
*at-ar* 'war'
- Ko.      *ayr-* [< \**ar-y-*] 'to strike (ball in game)'  
[*ayr-ayr-*]

Ko~~d~~.      *ad-i* '[lightning] strikes' [song word]

Ka.      *ad-acu* 'to rap, cuff'  
*ad-ar* 'to pounce upon'  
*ad-aru* 'an attack'  
*ad-i* 'beating, a blow'  
*ad-e* 'to strike or throw with finger'

Tu.      *ad-ikai* 'defeated, vanquished'

Te.      *ad-ucu* 'to beat, strike'  
*ad-upu* 'a stroke, blow'  
*dancu/dancu* [< \**aṭ-anc*] 'to pound, beat'

Pa.      *aṭṭ-* 'to strike'

Ga.      [011.] *aṭ-* 'to strike'  
[S.] *aṭṭ-* 'to strike, beat'

Kui.      *da:mb-* [< \**aṭ-amp-*] 'to pound, crush by pounding'  
Root \**aṭṭ-/ \*aṭ-V (DED 67)*

2. Ta.

*aḷ-u* 'to cry, weep'  
*aḷ-ai* 'to call', n. 'crying'  
*aḷ-uniku* 'to weep'

Ma.      *aḷ-u* 'to weep, cry'

Ko.      *ag-* [< \**aḷ-k-*] 'to weep, cry'

To.      *or-* '[child] weeps'

Ka.      *aḷ*, *aḷ-u* 'to weep, cry', n. 'weeping'  
*aḷ-a*, *aḷ-ke* [> *akke*] 'weeping'

Tu. [B.] *aḷ-* / [C.] *ar-* 'to weep'

Kol.NK. *ar-* 'to weep'

Pa. Ga. [011.] *aṛ-* 'to weep'

Ga. [S.] *aḍ-* 'to weep'

Go.      *a:ṛ-* 'to weep'

Kon~~d~~a *ar-ba-* 'to weep'

	Root	* <i>a:l-</i> /* <i>al-</i> -V [DED 240]
3.	Ta.	<i>a:, a:-y</i> ‘female of ox, sambur, and buffalo’. <i>a:-y</i> ‘the cowherd caste’
	Ma.	<i>a:, a:-n</i> ‘cow’ <i>a:-yan</i> ‘cowherd’
	Ko.	<i>a:-v</i> ‘cow’
	Ka.	<i>a:, a:-vu</i> ‘cow’ <i>a:-kał, a:-kała</i> ‘cow’
	Te.	<i>a:-vu</i> ‘cow’
	Kur.	<i>a:-y</i> ‘cow’
	Malt.	<i>a:-yu</i> ‘cow’
	Root.	* <i>a:-</i> [DED 283]
4.	Ta.	<i>i:-</i> ‘fly, bee, ( <i>tēp</i> ) <i>i</i> ‘(honey) bee’
	Ma.	<i>i:-cea</i> ‘fly’
	Ko.	<i>i:-p</i> ‘fly’
	To.	<i>i:-py</i> ‘fly’
	Te.	<i>i:ga</i> [< * <i>i:-n-ga</i> ] ‘fly’
	Kol.	Nk. <i>ni:-nga</i> ‘fly’
	Kur.	( <i>ti:n</i> ) <i>i</i> : ‘bee’
	Malt.	( <i>te:n</i> ) <i>i</i> ‘bee’
	Br.	<i>i:L</i> ‘fly’
	Root	* <i>ni:-</i> (DED 453)
5.	Ta.	<i>kal-anku</i> ‘to be stirred up’ <i>kal-akku</i> ‘to confuse’ <i>kal-akkam, kal-akku</i> ‘being agitated (as surface of water)’
		<i>kal-a:vu</i> ‘to be perturbed, confused’ <i>kal-a:y</i> ‘to get angry’ <i>kal-a:m</i> ‘war’

	<i>kal-a:pam</i>	'disturbance'
	<i>kal-ul</i>	'to become turbid (as water)' n. 'weeping'
	<i>kal-il</i>	'to weep', n. 'muddy water'
Ma.	<i>kal-an̩nu</i>	'to be mixed'
	<i>kal-akku</i>	'to mix[tr.]'
	<i>kal-akkam</i>	'turbidness, confusion'
	<i>kal-akku</i>	'muddy water'
	<i>kal-acu</i>	'to be disturbed'
	<i>kal-a:pam</i>	'confusion, quarrel'
	<i>kal-ampu</i>	'to get confused', n. 'uproar, quarrel'
Ko.	<i>kal-g-</i>	'to be mixed'
	<i>kal-k-</i>	'to mix (tr.)'
To	<i>kal-x-</i>	'to be, stirred up'
	<i>kal-k-</i>	'to stir up'
Ka.	<i>kal-aku, kal-an̩ku</i>	'to agitate, perturb'
	<i>kal-adu</i>	'to be shaken or perturbed'
	<i>kal-umbu</i>	'to perturbate'
	<i>kal-uhe</i>	'turbidness, impurity'
Kod.	<i>kal-ang-</i>	'to be stirred up'
	<i>kal-ak-</i>	'to stir up'
Tu.	<i>kal-an̩ki-</i>	'to be turbid'; n. 'turbidness'
	<i>kal-ambu-</i>	'to quarrel, fight'
Te.	<i>kal-ägu</i>	'to be agitated'
	<i>kal-äcu</i>	'to disturb'
	<i>kal-äka, kal-äkuva</i>	'confusion, trouble'
	<i>kal-äta,</i>	'disturbance'
Kur.	<i>xal-ax-</i>	'to disturb'
Malt.	<i>qal-G-</i>	'to disturb (as water)'
	Root * <i>kal-</i>	[DED 1096]

In most of the cases, the roots alone are common to all the Dravidian languages and the derivative suffixes differ from

language [or language group] to language (or language group), In such cases, we have to assume that the root alone was there in Proto-Dravidian and that the derivative elements (or suffixes) were added to it in later stages [see Krishnamurti, 1961 : 161-162]. Identical or cognate derivative suffixes are often found only in languages that constitute a subgroup and in such cases, it is certain that the concerned suffix has been added at the proto-stage of the particular subgroup; see the Kota and the Toda words in example 4 above.

## 2.2 Types of root

2.2.1. It is necessary to set up six types of root in Dravidian. They are: [i] (C)V-, [ii] (C)V:-, [iii] (C)VC-, [iv] (C)V:C, [v] (C)VCC- and [vi] (C)V:CC- [C = consonant, V = short vowel, V: = long vowel. The initial consonant is optional], 2.2.2. (C)V-. This type of root almost always occurs bound i.e. it always occurs with a derivative element (or suffix). In many cases, this will be the alternant of the root of one of the other types. The following are the examples:

The demonstrative bases \**a-* [distant], \**u-* [intermediary] and \**i-* [proximate] as in Ta. *avan*, *uvan*, *ivan* 'he[dist. prox., inter]', *aval*, *uval*, *ival* 'she', *avar*, *uvar*, *ivar* 'they [hum]' and several other forms and their cognates in the other languages [see DED1, 475 and 351].

The \**ta-* in the past stem \**ta-n̥t-* of *taru* 'to give (to 1st or 2nd person)' (Ta. *taru* (*ta-n̥t-*), Ma. *taru* (*ta-n̥n-*), Ko. *tār-* (*ta-d-*), To. *tōr-* (*to-d-*), Ka. *tar*, *tār* (*ta-nd-*) Kod.*tar-* (*ta-nd.*) (DED 2526).

The \*va- in the past item \*va-nt- of *varu* 'to come' (Ta. *varu* (*va-nt-*), Ma. *varu* (*va-nn-*), Ko. *vār-* (*va-d-*), To. *pōr-* (*po-d-*), Ka. *bar*, *bār* (*ba-nd-*), Kod *bar-* (*ba-nd-*). (DED 4311).

This type of root is rare compared to the other types. In many cases, we have to reconstruct more than one variant of the root for one and the same etymological group; such alternations will be discussed in detail in Chapter 14.

2.2.3. (C)V:-. This type of root occurs free (i.e., without a derivative suffix) as well as bound (i.e. with a derivative suffix). See examples 3 and 4 in 2.1. Other examples are as follows.

6. Ta.Ma.ka: 'to preserve, watch'. Ko. *ka:-v-* To. *kō-f-*. Ka. *ka:*, *ka:-y-*, Kod. *ka:-* 'to wait'. Te. *ka:-cu* 'to watch, protect'. Pa.Ga. (Oll.) *ka:-p-*. Kui.ka:-. Kur. *xāp-*. Malt. *qa:p-*. Br. *xwa:f-* PDr. \**ka:* (DED 1192).

7. Ta. *pu:* 'to flower', n. flower; *pu:-ppu* flowering'. Ma. *pu:-(vu)* 'flower', *pu:-* to blossom', *pu:-ppu* 'a crop'. Ko. *pu:* flower'. To. *pu:-f-* 'to blossom', n. 'flower'. Ka. *pu:* 'to flower, n. flower'; *pu:-vu*, *pu-vvu* 'flower'. Kod. *pu:(vi)*. Tu. *pu:* Te. *pu:-(vu)*, *pu-vvu* 'flower', *pu:-cu* 'to blossom', *pu:-ta*, 'blooming'. Kol. *pu:v*. (Kin.) *pu:-ta* 'flower', Nk. *pu:-ta*, Pa. *pu::*; *pu:-p-* 'to flower', Ga. (011.) *pu:* 'flower' *pu:-p-* 'to flower' (S) *pu-vvu* 'flower', *pu:-k-* 'to flower'. Go *pu-ñña:r* 'flower'. Konda *pu:-ñ* 'flower', *pu:-* 'to blossom'. Kui *pu:-ju* 'flower', *pu:-* 'to blossom' Kuwi (F.) *pu:yu;*(S) *pu:-ngā* 'flower'. Kur., *pū:-p*, (Hahn) *pu:-mp*, *puyd-* 'to bloom', Malt. *pu:-pu* 'flower', *pu:th-* 'to blossom'. PDr. \**pu:-* (DED 3564.)

2.2.4. (C)VC-. This type of root occurs free as well as bound

See examples 1, 2 and 5 in addition to the following.

8. Ta. *ił-am*, *ił-ai* 'place'. Ma. *ił-a*, *eł-a*, *ił-am*, *eł-am* Ko. *er-m*. To. *ır-n*. Ka. *id-e*, *ed-e*, *ed-a*. Kod. *ēd-e* 'the company or proximity of a person'. Tu. *id-e* 'place'. Te. *ed-a*, *ed-amu*. PDr. \**ił-*. (DED 368).

9. Ta. Ma. *ney* 'butter, ghee'. Ko. *nay*. To. *nīy*. Ka. *ney*, *nē:y*. Kod. *ney*. Tu. *ney-i*, *ne:y-i*. Te. *ney-yi*, *ne:-yi*. Kol.NK, Pa.Ga. *ney*. Go. *ni:* 'oil'. Kui *ni:-ju*. Kuwi *ni-yu* Kur. *nē:-ia* 'grease, fat'. Malt, *neŋ-ya*. PDr. \**ney-* (DED 3104).

2.2.5 (C)V:C-. This type of root occurs free as well as bound. Before a derivative suffix beginning with a vowel, the long vowel of the root will be shortened regularly in verb bases and simple trisyllabic nominal bases but occasionally so in disyllabic nominal bases (see Chapter 14).

10. Ta. Ma. *a:l* 'man, husband', *a:n* 'male'. Ko. *a:l* 'man'. To, *ōL* 'man, Toda'. Ka. *a:l* 'servant', *a:l*, *a:n* 'male'. Kod. *a:li* 'servant'. Tu. *a:li* 'person'. Kur. *a:l*, *a:l-as* 'adult male, husband', *a:l-i* 'woman, wife'. PDr. \**a:l-* [DED 342(a)].

11. Ta. *va:l-ai* 'plantain, *Musa paradisiaca*'. Ma. *va:l-a* Ko. *va:g* (< \**va:l-k*), *va:y van*. To. *pa:w*. Ka. *ba:l-e*, *ba:l-e*. Kod. *ba:l-e*. Tu. (B) *ba:l-e*, (C) *ba:r-e*. PSDr. \**va:l-ay* (DED 4403).

12. Ta. *va:n*, *va:n-am* 'sky, cloud, rain'. Ma. *va:n*, *va:n-am* *ma:n-am*. Ko. *va:n-m*. To. *pōn*, Ka. *ba:n*, *ba:n-a*, *ba:n-a*, *ba:m*, Kod., *ba:n-a*. Tu. *ba:n-a*, *ba:n-a*. Te. Kol. NK, *va:n-a* 'rain' Pa. *va:n-i*, Ga. *va:y-in*. PDr. \**va:n-(am)*, (DED 4410).

2.2.6. (C)VCC-. This type of root occurs either free or bound in disyllabic nominal bases; but in verb bases it always occurs free. It alternates with the (C)VC- type before a derivative suffix in verb bases and trisyllabic nominal bases [see Chapter 14]. Examples:

13. Ta. *tappu* 'to err', n. 'fault', *tapp-al*, 'fault'. Ma. *tappu* 'to escape' n. 'blunder'. Ko. *tap-* 'to make a mistake', n. 'mistake'. To. *top-* 'to fail to come', n. 'a fine'. Ka. *tappu* 'to err', n. 'mistake', *tappa-al* 'erring'. Kod, *tapp-* 'to escape', n. *tappi* 'a mistake'. Tu. *tappu* 'to err', n. 'mistake', Te. *tappu* 'to err', n. mistake'. PDr \**tapp-* [DED 2498].

14. Ta. *kaṭṭu* 'to tie, build', n. 'tie', *ka-ṭṭai* 'dam'. Ma. *keṭṭu* 'to tie', build', n. 'tie' Ko. *kaṭ-* 'to tie', n. 'knot', To. *kōṭ-* 'to tie, build', n. 'knot'. Ka. *kaṭṭu* 'to bind', n. 'binding', *kaṭṭ-e* 'dam', Kod- *Kēṭṭ-* 'to tie, build', n. *kēṭṭi* 'knot, bundle'. Tu. *kaṭṭi-* 'to tie', n. 'tie', *kaṭṭ-a* 'dam'. Te. *kattu* 'to tie, bind', n. 'tie', *kaṭṭ-a* 'bundle', *gaṭṭu* 'dam', Kol. *kaṭ-* 'to tie build', *kaṭṭ a* 'bund of field'. NK. *kaṭṭ-* 'to tie, build', *kaṭṭa* 'bund of field'. Pa. *kaṭṭ-* 'to tie', n. *kaṭṭa* 'bund of field', Ga. *kaṭ-* 'to tie, build' Go. *kaṭṭ-* 'to be shut (of a door)', *kaṭṭ- a*: 'a dam'. PDr. \**kaṭṭ-* (DED 961).

15. Ta. Ma. *nampu* 'to believe, long for'. Ko. *namb-*. To *nob-*. Ka. *nambu*. Kod. *namp-*. Tu. *nambu-*, *nammu-*. Te *nammu*. Kuwi *namm-*. PDr. \**namp-*, [DED 2975].

This and the following types of root were not recognized so far by Dravidianists [for example, Bh. Krishnamurti, 1961 pp. 135- 136, 171-176]. The final consonant, i. e. the second consonant of the cluster or geminate after the vowel in these was considered by them to be the derivative suffix or part of it. However, it seems to be proper to consider it also as part of the root for the following reasons:

1. It occurs in many Dravidian languages in a number of cases as uniformly as the preceding sounds and therefore to separate it from the root appears to be counter-intuitive. In many cases it will be identical or homorganic with the preceding consonant.

2. Just as a long vowel of the root is shortened, a long [or geminate] consonant is also shortened [that is, loses gemi-

nation) when the number of syllables in a base are increased by the addition of a derivative element (or suffix) that begins with a vowel. The process in both the cases is one and the same, that is, reduction of the root syllable.

Krisnamurti (1961:137), however, recognizes the difficulty in reconstructing the same type of root, i.e., (C)VC- for contrasting cases like the following although earlier [op.cit-p.81] he asserted that: 'One can with equal justification reconstruct for PDr. either a single consonant or geminate in this position. Since there is no contrast between single and double consonants in the root-final position, whichever solution we choose is only a matter of descriptive facility and pattern uniformity".

Ta. Ma. Ka. Te. (and some others) *kaiṭtu* 'to tie (DED 961) versus

Ta. Ma. *iṭu*, Ka. Te. (and some others) *iḍu* 'to place (DED 375)

To get over the difficulty, he (op.cit., p.137) suggested that in cases like *kaiṭtu*, the *u* is non-morphemic while in cases like *iṭu* it is morphemic [i. e., a suffix]: "These two vowels obviously contrast in their effect on the preceding stop, for before a non-morphemic -u the PDr. final stop following a short vowel is always doubled. Therefore, if we reconstruct \**iṭ-* for *iḍ-u* and \**kaṭ-* for *kaiṭtu*, the different developments in the final consonants can be accounted for only by the different values of the following vowels". In this analysis, recognition of the final *u* as morphemic or non-morphemic depends entirely on the fact whether the preceding consonant is single or geminate but not on any other criterion. Therefore it is better to take the entire geminate consonant as part of the root in cases where it occurs.

2.2.7. (C)V:CC-. This type of root occurs either free or bound in disyllabic nominal bases, but in verb bases it always occurs free; examples;

16. Ta. *ka:kka:i*, *ka:kka:y* 'crow, *Corvus splendens*'. Ma. *ka:kka*, *ka:kkacci*, *ka:kan*. Ko. *ka:k*, *ka:yk*, To. *ka:k* Ka. *ka:ke*, *ka:ki*, *ka:ge*, *ka:gi*, Kod. *ka:ke* Tu. *ka:kke*, *ka:ka*, *kakke*. Te. *ka:ki*. Kol. *ka:ka*, Pa. *ka:kal*. Ga. (011) *ka:kal*. Go. *ka:ka:γ*. Konda *ka:ki*. Kui. *ka:ka*. Kuvi (P.) *ka:'va*, Kur. *xa:xa:* Malto *qa:qe*. Br. *xa:xo*. PDr. \**ka:kk-ay* (DED 1197).

17. Ta. *ta:n̪tu* 'to dance, jump over, cross'. Ma. *ta:n̪tu*, *ta:t̪tu* 'to get over or through'. Ko. *də:t̪-* 'to cross'. To. *to:t̪-* Ka. *ta:n̪tu*, *da:t̪u*, *da:n̪tu* Tu (B) *da:n̪t̪i*, (C) *ta:n̪t̪i*. Te. *dā:t̪u* Kol. *da:t̪-*. PDr. \**ta:n̪t̪-* (? also \**ta:n̪t̪-*) (DED 2578).

18. Ta. Ma. *pa:mpu* 'snake'. Ko. *pa:b*. To. *po:b*, Ka. *pa:vu* *ha:vu*. Kod. *pa:mbi*. Te. *pa:mu*, Kol. NK. NK (Ch. P.) *pa:m* Pa. *ba:m*. Ga. (P.) *ba:mb*, (011). *ba:m*, (S.) *ba:mu*. PDr. \**pa:mp-* (DED 3361).

As pointed out above (2.2.6.), this type of root must also be recognized for Dravidian.

### 2.3. Derivative Element (Suffix)

2.3.1. The sound or sequence of sounds that follows the root to constitute a base is called a derivative element or suffix. (The enunciative *u* or *i* (see 8.3) which occurs at the end of words in many languages is not a derivative suffix; in Old Tamil the enunciative *u* (phonetically unrounded, i.e. *i*) occurs only after a stop. The other languages that contain the enunciative vowel are Malayalam (*ə* in modern speech), Kodagu (*i*) Kannada (*u* in the standard dialect, but *i* in many other dialects), Tužu (*i*), Telugu (*u*), some Gonži dialects (*u*), Konda (*u*), Kui-Kuvi (*u*) and Malto (*u*).) A root, if it ends in a vowel is followed by a derivative suffix beginning with

a consonant and if it ends in a consonant is normally but not always followed by a derivative suffix beginning with a vowel. The vowel at the beginning of the derivative suffix will be short *a*, *i* or *u* (rarely *a:* as in Ta. *nil-a:*, *nil-avu'* 'moon, moonlight' (DED 3113), *pal-a:*, *pal-avu*, *pil-a:* 'jack tree' (DED 3290). This vowel (V) itself may constitute the derivative suffix or it may be followed by a single consonant (stop or non-stop, C), a geminate stop (PP) or a nasal plus the homorganic stop (NP); in the parent language, i. e. Proto-Dravidian, the sequence \*NPP is also possible (see Chapter 21). The long *a:* may be followed only by a non-stop consonant as in Ta. *pul-a:l* 'flesh, raw meat' (DED 3718). In primary nominal bases, the derivative suffix of the type -VPP may be further extended by the addition of another suffix of the type -VC, cf. Ta. *mul-akku* 'sound', *mul-akk-am* 'loud noise as of thunder or drums' (DED 4092), *vir-uppu*, *vir-upp-am* 'desire' (DED 4443), *val-akku*, *val-akk-am* 'usage' DED 4330).

2.3.2. Caldwell (1956: 204-210) considers the vowel or the vowel plus a non-stop consonant that follows the root as in Ta. *at-i* 'to beat', *val-ar* 'to grow' as "particle of specialisation" which according to him is "originally perhaps a formative addition, or perhaps the fragment of a lost root or lost post-position by which the generic meaning of the stem is in some manner modified" (*ibid.* p.204). He further observes: "The second syllable appears sometimes to expand and sometimes to restrict the signification but in some instance, through the absence of synonyms, its force cannot now be ascertained". (*ibid.* pp. 204-205). He calls the P, NP, or PP (followed by the enunciative *u*) part of a derivative suffix "formative suffix" (*ibid.* pp.198-203) in both nouns and verbs, e.g. Ta. *pər-u-ku* 'to be increased' *at-a-nku* 'to be contained', *at-a-kku* 'to contain', *pat-a-ku* 'boat', *kil-a-nku* 'root' *kar-u-kku* 'sharp edge'. Although he notes that: "the original meaning of most of

the particles used as formative suffixes or particles of specialisation, is now unknown ..." (*ibid.*, p. 209), he surmises that: "These particles seem originally to have been the formatives of verbal nouns, and the verbs to which they are suffixed seem originally to have had the force of secondary verbs; but whatever may have been the origin of these particles, they now serve to distinguish transitive verbs from intransitives, and the adjectival form of nouns from that which stands in an isolated position and is used as a nominative" (*ibid.*, p. 198).

It is agreed by all scholars that the so called "derivative suffixes" cannot be assigned any specific meaning although they serve to modify the basic meaning of the root to some extent; even then it is not possible to say that a particular derivative suffix modifies the meaning of the root in an identical way in all cases. Therefore the use of the term 'suffix' with reference to such ones is not entirely appropriate. Moreover, we have to distinguish these from the genuine derivative suffixes like those that derive a noun from a verb. It is therefore more proper to call these "derivative or extensional elements or particles" rather than "derivative suffixes". In cases where there is an alternation of the type—Intransitive (N) P: Transitive PP in verbs (as in Ta. *at-añku* 'to be subdued', *at-akku* 'to subdue', *DED* 56(a)), the PP is usually considered to have transitive meaning (Krishnamurti 1961:142, 157). But if we set up a covert allomorph of the transitive suffix and account for the change by a morphophonemic rule, as (N)P+{Tr.} → PP, we need not assign any semantic value for the derivative -PP in such cases (see P. S. Subrahmanyam 1971:74-77).

**2.3.3.** Although in most of the cases we cannot assign any definite meaning to or give any historical explanation for the

occurrence of a derivative element, it is possible to find out the origin of a few of them through comparative study.

2.3.4. Krishnamurti (1961: 162–166) has shown that the *-cu* derivative element in Telugu verbal bases like *nil-(u)cu* ‘to stand’, *va-ccu* ‘to come’, *te-ccu* ‘to bring’ is originally part of the central Dravidian past participial suffix *\*-ci* and that it was incorporated into the base due to wrong segmentation, e. g. Te. *nil-ucu* ‘to stand’ (other languages *\*nil-*, DED 3043) and *nad-acu* ‘to walk [other languages *\*nat-a*, DED 2957]. In a similar way, the intransitive element of the type (N)P in some intransitive bases of Tamil-Malayalam-Ko $\ddot{d}$ agu-Kota-Toda and of Kui has been created on the analogy of the prevailing pattern — intransitive (N)P and transitive PP, e. g. Ta. Ma. *el-u*, *el-umpu* ‘to rise’: *el-uppu* ‘to cause to rise’ (DED 723(a)), Ta. Ma *tir-i*, *tir-umpu* ‘to turn’ (intr.) : *tir-uppu* ‘to turn (tr.)’ (DED 2655), Kui *gra:-mb-* ‘to learn: *gra:-p-* ‘to teach’ (Ta. *kal* ‘to learn’, *kar-pi* ‘to teach’ (DED 1090), Proto. Tamil-Malayalam-Ko $\ddot{d}$ agu-Kota-Toda *\*ni:-t-* ‘to be long’ besides PDr. *\*ni;l-*, the transitive of which is *\*ni:t-t-* (DED 3059) (see for details, P. S. Subrahmanyam 1971:68–74),

Krishnamurti (1961:146–147) thinks that the derivative elements *-Vr*, *-V $\tau$* , *-Vl* and *-V $\ell$*  (of verb bases) which occur mainly in South Dravidian and Telugu were originally intransitive or middle voice suffixes.<sup>1</sup> He suggests a relationship between the *r* or  *$\tau$*  of these and the suffix *-r-* in

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1. He says: “Another striking feature, which concerns not only V + r,  $\tau$  suffixes but also the V+l,  $\ell$  suffixes is that most of the verbal bases with these suffixes are intransitive in their signification. This is more so with -al/-ul forms. This fact, coupled with the complete absence of these suffixes as

Kurux (and Malto) which functions both as reflexivizer and and passivizer of verbs. Emeneau (1975: 2-3) endorses Krishnamurti's view but points out that the Kurux-Malto evidence leads us to consider these derivative elements as belonging to Proto-Dravidian rather than as creations in South Dravidian and Telugu.<sup>2</sup> This theory, although favoured by the two scholars is not entirely satisfactory because of the following reasons:

1. In Dravidian there are many intransitive (and transitive) verbs without any derivative elements, e. g. *nil* 'to stand' (DED 3043), *cel* 'to go' (DED 2286), *naku* 'to laugh' (DED 2944) etc. These verbs prove that a suffix is not necessary to express intransitive meaning and that whether a verb is transitive or intransitive can be decided only on the basis of syntactic and semantic criteria. In the case of transitive-

derivatives in Central and North Dravidian and their irregular distribution in SDr., suggests that they probably originated in PSDr. as intransitive or middle voice-suffixes, and were later incorporated into the base."

2. He (1975:2) says: "He (i.e. Krishnamurti) thought of restriction of this reconstruction to PSDr. apparently adding the Kurux evidence as an after-thought without reconsidering that it changes the reconstructive picture considerably. My own conclusion would be that the systematic occurrence in Kurux and Malto, one of the branches of NDr., and the sporadic occurrences in SDr. and Telugu, require reconstruction of the pertinent voice suffix for PDr. with retention of the system in Kurux-Malto, loss of the system but retention of some forms as enlarged stems in SDr. and Telugu, and complete loss both of the system and of all forms in CDr. apart from Telugu".

causative suffixes, their morphological status can be established beyond doubt because of the presence of pairs of verbs, one of them containing the suffix in question and the other not and this is accompanied by relevant semantic distinction. No such pairs exist in any language other than Ku'ux - Malto to show that these elements are intransitive.

2. Apart from the trills, there are other consonants that occur in the derivative elements to which no real semantic value can be assigned, as observed above. Even for the trills, no semantic explanation is possible when they occur in nouns, e.g. Ta. *mal-ar* 'flower' (DED 3879), Ta. *kuł-ir* 'cold' (DED 1523), Ta. *ña:y-iłu* 'sun' (DED 2371).

Krishnamurti (1961:157) further observes that: "Again most of the forms with the -(V)mu suffix are transitive, as opposed to forms in -l, -r, and -y suffixes which are predominantly intransitive ..... From this it appears that these and such other semi-derivational suffixes have had originally a grammatical function, i. e., introducing transitive or intransitive signification in the meaning of root morphemes". Lack of contrastive pairs and of consistency in the matter of semantic signification of a particular element make it difficult to accept this proposal without reservation.

2.3.5. In his 1975 paper (pp. 3-18), Emeneau made a thorough study of the plural action (or intensive-frequentative) bases in Pengo-Kuwi from a descriptive and a comparative point of view. In Pengo-Kuwi (i. e. Pengo-Manda-Kui-Kuwi), a verb base takes the plural action suffix to denote one of the following meanings: One person doing a number of things; one person doing one thing many times, more than one person doing a number of things; and more than one person doing one thing many times. The Kui suffix has five allomorphs:-k-

*-pk-*, *-p-*, and *-b-* and *-v-* while the Pengo suffix has three allomorphs: *-ka-*, *-pa-* and *-ba-* (information on the other languages is lacking). Examples: Kui *se:p-* ('to sweep', (pl. act.) *se:pk-*, Pe. *hi:p-* (pl.act. *hi:-pk-*); Kui. *peg-* 'to pick up' (pl. act. *pes-k-*), Pe. *pez-* (pl. act. *pes-ka-*); Kui *ves-* 'to speak, tell' (pl. act. *ves-p-*), Pe. *vec-* (pl. act. *vec-pa-*). Emeneau points out that although other languages of the family do not have a productive system of derivation of this kind, they do have some stems that correspond in form to the plural action stems of Pengo-Kuwi. "Frequently, these derived stems are paired with a simplex or with some other derivative type, for which no differentiating meaning is yet known; frequently, however, the derived stem occurs in a language without any simplex beside it" (so Emeneau 1975:8) Emeneau observes that Kon̄da, and Gon̄di which are most closely related to Pengo-Kuwi have more pairs and plural tantum (i.e. plural only) forms than any other language outside the subgroup. While the velar suffix occurs very commonly in non-Pengo-Kuwi languages, the labial occurs virtually only in Kon̄da outside Pengo-Kuwi. Examples for *\*-kk-*(or *\*-pp-*) plural action suffix in languages other than Pengo-Kuwi (in comparison with Pengo-Kuwi):

1. (DED 3623) 'to pick up, clean, weed' — pl. tant:  
 Ta. Ma. *per-ukku*, To. *per-k-*, Ko $\ddot{d}$  *por-ik-*, Ka. *her-ku*, *he-kku*, Kol. *pet-k-*; simplex: Tu. *pejj-*, Nk. *pett-*, Kon̄da *per-*, Mand. *piy-*, Kuvi *per-*, Malt. *peh-* (:Pe. *pez-*: *pes-ka-*, Kui *peg-*: *pes-k-*, Go. *per-*: *peh-k-*, Pa. *ped-*: *pet-k-*, Ga. *piy-*: *piy-k-*, Kur. *pes-*: *pes-g-*).

2. (DED 3404) 'to squeeze, knead' — *\*pic(c)-/ \*pic-V-:*  
 Pe. *pi:c-*: *pi;c-ka-*, Ta. *pic-ai:* *pic-akku*, Ka. *his-i : pis-uku*

Tu. *pi:s-*: *pis-k-*, Pa. *pi:c-*: *pi:-k-*; pl. tant.: Ko. *pic-k-*, Te. *pis-uku*, Go. *pis-k-*, Kur. *pic-ka?*-; simplex: Mand. *pi:c-*, Kui-Kuwi *pi:c-*.

3. (DED 757, 684, 687) 'to dance' — \**e:nt-*, \**ent-V-*, \**et-V-* : Mand. *e:nd-*: *e:t-ka*, Kui *et:nd-* : *e:-k-*, Pa. *e:nd-*: *en-k-* ('to play'), Ga. *e:nd-* : *end-k-* ('to play'); pl. tant.: To. *öθ-k-* ('to jump'), Ko. *ed-k-* '(Todas) to dance, jump high'); simplex: Kol. Nk.Nk (Ch.). Go. Konda Pe. Kuvi *e:nd-*.

4. (DED 1015) 'to cut, fell' — \**katt-*:

Pe. *kat-* : *kat-ka-*, Kui *kat-* : *kat-k-*, Kuvi *kat-* : *kat-k-*, Konda *kat-* : *kat-ki* ('to cut down trees in a forest'); pl. tant.: Kol. *kat-k-*, Nk (Ch.) *kat-k-*; simplex: Pa. *katt-*, Ga. *kat-*, Go. *katt-*, Mand. *kat-*.

5. (DED) 920) 'to bite, gnaw' — \**kacc-* : Kui *kas-* : *kas-k-*, Kuvi *kacc-* : *kas-k-*, Go. *kacc-*: *kas-k-*; simplex in other languages e. g. Ta. *kaccu*.

6. (DED 1192) 'to wait, watch' — \**ka:-*: Pe. *ka:-*: *ka:-pa-*; Kui *ka:-* : *ka:-p-*; pl. tant. : Kur. *xa:-p-*, Malt. *qa:-p-* ; simplex or other derivative in the other languages.

7. (DED 3089) 'to pulverize, grind (grain), thrash' — \**nu:r-/* \**no:r-/* \**nur-V-/* \**nor-V-* : Ta. *nūru* : *nur-ukku*, Te. *nu:rū* : *nur-upu*, Go. *no:r-* : *no:h-k-*; pl. tant. : Ma. *nur-ukku* (*nūru* is intransitive), Ka. *nur-uku*, Kol. *nor-p-*, Kuvi *no:r-p-*; simplex forms are, e. g. Konda *nu:r-*, Pe. *nu:z-*, Mand. *nu:y-*, and instances of other suffixes are Tu. *nur-i-*, etc.

8. (DED 1798) 'to bite, gnaw' — \**kor-* : Kođ. *kor-i-* : *kur-i-k-*; pl. tant.: Ka. *kor-uku*, Kuřuku, Te. *kor-uku*, Kol.Nk.

Pa. *kor-k-*, Go. *kor-k-*, Konda *koRk-*; otherwise, Ta. Ma. *kɔr-i*, Tu. *koj-al-*.

9. (*DED* 4512) 'to search' — \**vet-* : pl. tant., Ka. *bed-aku*, Te. *ved-aku*, (?) Go. *meh-k-*; simplex: Kur, *bed-* Malt. *bed-*

10. (*DED* 3136) 'to wash' — \**no:t-*, \**no:t-V-* : Pe. *noz-*, *uuz-* : *nos-ka*, *nus-ka-*, Kui *nog-*: *nobg-* (<\**nog-b-*), Konda. *nor:* *nor-ba-*; pl. tant., Ta. *nu:t-akku*; other languages have simplex e.g., Pa. *nod-*, Kol. *od-*, Go. *norr-*, Mand. *nuy-*, Ku*r.no:-r* (Pfeiffer).

11. (*DED* 3440) 'to press, squeeze, wring out' — \**pil-* : pl. tant.: Kur. *pi:x-*, Malt. *pi:q-*; other languages with other suffixes, e.g. Ta. Ma. Ka. *pil-i-*, Te. *pid-ucu*, Kui *pri-h-*, Br. *pri-nc-*.

12. (*DED* 837) 'to make noise, cry, weep' — \**o:l-*, \**ol-V-* : pl. tant. Kur. *ol-x-*, Malt. *ol-G-*; other languages have simplex or with other suffixes, e.g. Ta. *o:l*, *ol-i*, *ul-ampu*.

Emeneau (1975:17) finally concludes : "PDr. had a system of plural action verb stem derivation with a set of allomorphs including \*-kk-, \*.pp-, and \*-p-/v-; the distribution of these allomorphs is still a problem. This system appears as a retention in the closely related subgroup made up of Pengo-Manda and Kui-Kuwi. All the other languages lost the system but retained some of the derived stems, either paired with the basic simplex or some other derivative therefrom, or in isolation (plural tantum). Sometimes even the derivative meaning was retained, especially when the basic meaning of the verb was inherently plural. It might be that better recording would show more such meanings than we now know."

2.3.6. It has been stated above that the initial vowel of a derivative element will be one of the vowels *a*, *i*, *u* or rarely *a*: (the *-ai* as in Ta. *mal-ai* 'mountain' (DED 3882), is structurally identical with *-ay* which is from PDr \*-ay). It is to be noted that *i* is not followed by a stop (P or PP) or the sequence nasal plus homorganic stop (NP) in verb bases. When followed by a consonant or consonant cluster, they are often lost in languages other than Tamil and Malayalam (see the examples given above in this chapter).

2.3.7. In Kannada (even in the oldest stage), the *u* or the *i* at the beginning of a derivative element is lost and consequently the root final (non-stop) consonant is assimilated to the consonant of the derivative element, e.g. Ka. *aldu*, *addu*, 'to immerse' (:Ta. *aluttu* 'to press down', Te. *addu*, DED 244), Ka. *mardu*, *maddu* 'medicine' (: Ta. *maruntu*, Te. *mandu*, DED 3863), *akki* 'rice' (: Ta. *ari*, *arici* (<\**ariki*), DED 178).

2.3.8. In Telugu (even in the older stage) the *u* at the beginning of a derivative element is lost when it occurs between certain consonants, see the examples in the above para; also *trippu* 'to turn (tr.)' (:Ta. *tiruppu*, DED 2655). Moreover, in Old Telugu *u* rarely *i* and *a*) after *n*, *l*, *d* or *r* and before a consonant is optionally lost, e.g. *kinuka/kinka/kiñka* 'anger' (DED, 1332), *ciluka/cilka* 'parrot' (DED 1318), *muliki/mulki* 'iron point of a goad', (DED 4098), *poläti/polti* 'woman' (DED 3717) *ka:luva/ka:lva* 'canal', (DED 1239), *kadugu/ kadgu* 'to wash' (DED 1154), *perugu/ pergu* 'to grow' (DED 3613).

2.3.9. In Kota and Toda the \**i* (not followed by a dental) of a derivative element changes into *y* but all other short vowels in this position and also *i* before a dental) are invariably lost whether they are followed by a consonant or not), e.g. Ko. *eyj* (<\**eiy*). 'rat', To. *isy* (:Ta. Ma. *eli*,

example 348); Ko.*et* 'bull', To. *est* (: Ta. Ma. *erutu*, example 346) Ko. *alv-* (*ałd-*) 'to measure', To. *al-* (*ałθ-*). (:Ta. *ala* (-*pp-*, -*nt-*) 'to measure' DED 252). Ko. To. *uny-* (*unc-*) 'to think', *uny(p)* 'thought' (: Ta. *unnippu*, DED 625).

Ko. *edyr* 'enemy' (: Ta. *etiri*, DED 680 To. *ōθir* is a loan) and Ko. *ma:dyr(m)* 'manner' (: Ta. *ma:tiri*, To, *mo:θiry*, DBIA 295) show that in that language \**i* of the third syllable is lost if the second syllable already contains *y* < \**i*. In Toda-Kota, the sequence *y* + dental results in a palatal with loss of *y* (see for details 26.5.). In Kota *y* undergoes metathesis with the preceding consonant under certain conditions (see 6.3.)

2.3.10. In the remaining non-literary languages also, the initial vowel of a derivative element is often lost, especially when it is followed by a consonant. Although this vowel is not found to occur in the present-day languages, we have to assume that it was present in the earlier unattested stage in certain cases. The root in such cases shows some alternations which are conditioned by the vowel of the derivative element (see especially Chapters 14 to 19). For example, the change PDr. \**a* > To. *a* (but not *o*) is conditioned in part by the derivative element, \*-*ay* which must have existed in pre-Toda (see 4.2.); similarly, in Kota the fronting of original back vowels is conditioned by \*-*ay* which was present in pre-Kota (see Chapter 18). Therefore, we conclude that the loss of derivative vowels in the various languages is an independent development in each language or subgroup (see Krishnamurti 1961 : 140).

2.3.11. It has already been stated that new derivative elements have been sometimes added to the root in individual languages or language groups and that this development, when found in more than one language, indicates their closeness.

For example, the derivative \*-nt in the word for 'five' characterizes the Tamil-Malayalam-Ko $\ddot{d}$ agu-Kota-Toda-Kannada subgroup of South Dravidian (Ta. *ayntu*, *añcu*, Ma.*añcu*, Ko. *anj*, To. *üz/üj*, Ko $\ddot{d}$ , *añji*, Ka. *ay(i)du*; but Tu. *ayñi*, Te. *e:nu*, *ay(i)du* (< Ka; example 1024); similarly \*-k occurs only in the North Dravidian languages in the word for 'horn' (Kur. *marag*, Malt. *margu*, Br. *marG* but Ta. *maruppu*, DED 3864).

#### 2.4. Inner Derivation

2.4.1. In a number of etymological groups in Dravidian, it becomes necessary to reconstruct more than one root of the types (C)VC or (C)V:C- to the Proto-Dravidian stage itself; such alternants, which differ from each other only in the matter of the final consonant appear in some cases in different subgroups. In a few cases of this sort one of the differing consonants may be explained as due to analogical creation or reshaping as in the case of Proto-Tamil-Malayalam-Ko $\ddot{d}$ agu-Kota-Toda-\*ni:-t- versus PDr. \*ni:l- (DED 3059), which has been just referred to. Another example is Te. *konu* (inscr. *koṇu* 'to take, buy' (also Ko. *kol-/koṇ-*, Tu. *koṇu-* against \**kol-* of other languages, DED 1788); here the past stem \**kon-t-<\*kol-nt-* is responsible for the reshaping of the root as \**koṇ-*. Where such explanation is not possible, we have to assume that the ultimate root is (C)V- or (C)V:- and that the following consonants were derivative elements in origin although they have been added to the root at very early stages. The process of identifying such root final consonants as derivative elements in origin is called "inner derivation" by Krishnamurti (1961 : 183-186) because these derivative elements belong to the inner layer in contrast to those which follow these and thus constitute the outer layer of derivation. He says: "Comparing such reconstructed roots of PDr. or individual sub-groups among themselves, it seems possible to discover further layers of derivation within the

reconstructed elements; thus in some cases (C)VC- can be further analysed as (C)V-C- and similarly (C)V:C- as (C)V:-C-. This is more obvious in the latter set where (C)V: emerges as the ultimate root element". (*ibid.* pp. 184-185). He further observes: "It is, however, to be expected that the inner layers of derivation have a greater degree of constancy than the outer ones, since they have been incorporated into the root for a longer time and new formations arise on them by addition of new derivative elements." (*ibid.*, p. 186).

For example, the verb meaning "to burn, glow" in Dravidian has the following reconstructed root variants (*DED.* 1219 & 1259):

- (i) \**ka:y-* : Ta.Ma.Ko.*ka:y-*, To. *ko:y-*, Ka. Ko*d*, Tu., *ka:y-*, Kur. *xa:y-* Malt. *qa:y-*.
- (ii) \**ka:nk-* : Te.*kā:gu*, Kol.Nk. *ka:ng-*, Kui. *ka:g-*, also cf. Ta.*ka:nkai* 'heat', Ka. *ka:nke*, Br.*xa;xar* 'fire'.
- (iii) \**ka:nt-* : Ta. Ma. *ka:ntu*, Kui *ka:nd-*, Kuwi *ka:d-*
- (iv) \**ka:l-* : Ma.*ka:l-*, Te. *ka:lu*, Pa. *karl-*.

Since the meaning of the four variants is almost the same and since there is phonetic similarity among them, we can take \**ka:-* as the ultimate root in this group; -y, -nk, -nt and -l are the derivative elements of the inner layers.

Similarly, a comparison of SDr. \**ke:l-* 'to hear, ask' (*DE* 1677) with Gondi *ke:nj-* 'to hear' leads us to conclude that \**ke:-* is the ultimate root and that -l and -nj were originally derivative elements.

The verb root \**pa:t-* 'to sing' (*DED* 3348) is reconstructable to Proto-Dravidian since it occurs in most of the daughter languages but the Tamil word *pa:* 'verse, stanza, poem' reveals that originally the root was \**pa:-* and that -t was the derivative element.

The PDr. verb root \*nil- 'to stand' (DED 3043) is well represented in the daughter languages but Ta. *niru* 'to put', *niruttu*, *niruvu* 'to set up', Ma. *niruttu* 'to make to stand', *niru* 'to weigh' and Kui *nis-* 'to stand' point to the root variants \*nitt-/\*nit. The ultimate root here seems to be \*ni-, -l, \*tt and \*t being derivative elements; also cf. Konda-Pengo-Manḍa- Kui-Kuvi \*nink- 'to rise' (DED 3033) which must be analyzed as \*ni-nk- with another derivative element \*-nk.

PDr \*ni:r 'water' (DED 3057) and \*ni:nt- 'to swim' (DED 3054) yield \*ni:- as the ultimate root, -r and -nt being derivative elements in origin.

2.4.2. Caldwell (1956 : 203) also carried out similar analysis and connected \*kompu 'a branch, twig' (DED 1759) with \*koy 'to pluck' (DED 1763) (root \*ko-), \*pa:mp 'snake' (DED 3361) with \*pa:y 'to spring' (DED 3362) (root \*pa:-), \*ve:mp 'margosa tree' (DED 4551) with \*ve:y- 'to thatch' (DED 4552) (root \*ve:-) and \*vamp 'abuse' (DED 4293) with \*vay- 'to abuse' (DED 4566) (root \*va-) but in many of these cases the semantic connections are not always straightforward or indisputable.

## Proto-Dravidian Phonemes

### 3.1. Vowel Phonemes

3.1. The following ten vowel phonemes can be reconstructed to Proto-Dravidian on the basis of comparative study.

	Front	Central	Back
High	<i>i i:</i>		<i>u u:</i>
Mid	<i>e e:</i>		<i>o o:</i>
Low		<i>a a:</i>	

The long vowels contrast with the corresponding short vowels in all the Dravidian languages. The following are the examples from the four literary languages and Tuṇu.

Tamil :

<i>kal</i> 'stone'	<i>ka:l</i> 'leg'
<i>v̥iṭu</i> 'to leave'	<i>vi:ṭu</i> 'house'
<i>kuṭi</i> 'to drink'	<i>ku:ṭi</i> 'having joined'
<i>neṛṭi</i> 'forehead'	<i>ne:ṛṭu</i> 'yesterday'
<i>keṭṭa</i> 'bad'	<i>ke:ṭṭa</i> 'that (was) asked'
<i>poṇ</i> 'gold'	<i>po:ṇ</i> 'cage'

Malayalam:

<i>mala</i> 'mountain'	<i>ma:la</i> 'garland'
<i>ira</i> 'prey'	<i>i:ra</i> 'palmyra fibre'

<i>kuṭa</i>	'umbrella'	<i>ku:ṭa</i>	'basket'
<i>eṭi</i>	'to throw'	<i>e:ṭi</i>	'increased'
<i>oṭi</i>	'to be broken'	<i>o:ṭi</i>	'ran'

## Kannada:

<i>pali</i>	'blame'	<i>pa:li</i>	'justice'
<i>kigu</i>	'small'	<i>ki:gū</i>	'to scratch'
<i>kuru</i>	'boil'	<i>ku:ru</i>	'to sit'
<i>bel</i>	'whiteness'	<i>be:l</i>	'to offer into fire'
<i>koḍu</i>	'to give'	<i>ko:tdu</i>	'horn'

## Tulu:

<i>nadi</i>	'to plant'	<i>na:dī</i>	'to search'
<i>piri</i>	'care'	<i>pi:re</i>	'sponge gourd'
<i>muri</i>	'to cut'	<i>mu:ri</i>	'bad smell'
<i>belē</i>	'price'	<i>be:le</i>	'work'
<i>koḍe</i>	'umbrella'	<i>ko:de</i>	'yesterday'

## Telugu:

<i>paḍu</i>	'to fall'	<i>pa:du</i>	'to sing'
<i>idi</i>	'this (thing, woman)	<i>i:di</i>	'having swam'
<i>mulugu</i>	'to be immersed'	<i>mu:lugu</i>	'to groan'
<i>enimidi</i>	'eight'	<i>e:nūgu</i>	'elephant'
<i>koruku</i>	'to bite'	<i>ko:rūka</i>	'desire'

Brahui has lost the original short \*e and \*o under the influence of the neighbouring Balochi language, which does not have them.<sup>1</sup>

1. See (Emeneau 1962:7-9). He says (p. 8): "Since the Brahui vowel system, with its lack of short o and its peculiar distribution and near-lack of short e, is unparalleled in the Dravidian family, and since all the contiguous non-Dravidian languages have similar systems, which are typical of the whole of the Indo-Iranian subfamily of Indo-European, it is an

3.1.2. Although long vowels are very common in the initial syllable in Dravidian, there are several constraints on their occurrence in the non-initial syllables. In Tamil-Malayalam long vowels occur as part of suffixes in non-initial syllables but they are extremely rare in the non-initial syllables of verbal and nominal bases and this is true of other languages as well; words like *kappa:ti* 'mirror' (DED 993) and *e:ma:ru* 'to be bewildered' (DED 760) are compound formations.

Kota shows long vowels in non-initial syllables like Tamil-Malayalam, cf., *ka:n-a:d* without seeing (:Ta.Ma.*ka:n-a:tu*). Toda<sup>2</sup>, Kodagu, Kannada,<sup>3</sup> Tulu, Telugu<sup>4</sup> and some other languages regularly shorten original long vowels of

obvious inference that Brahui owes this peculiarity to its neighbors. Of the three neighboring systems sketched, those of Sindhi and Balochi are nearer in details to Brahui than is Pashto. Since Sindhi has in fact vowels *e* and *ɔ* in its system and Balochi has no short vowels in the mid positions, we may *prima facie* identify Balochi as the language which has influenced Brahui. Unless and until other evidence is found, this may be taken as the correct solution".

2. Toda personal suffixes with short vowels illustrate this point, for example, 1 sg. *-en*, *-in-i* < \*-e:*n*, pl. excl. *-em*, *-im-i* < \*-e:*m*; however, the plural suffix *-a:m* contains a long vowel and this seems to be an exception.

3. In Kannada inscriptions upto the 8th century A.D. the suffix for the negative adverb is *-a:de* besides *-ade*; the former variant is more original since it retains the long vowel (see Subrahmanyam 1971:347).

4. In Modern Telugu long vowels in non-initial syllables occur due to some later changes like compensatory lengthening. For example, nouns ending in *am* replace it by *a:* and *a:n* before the plural suffix and the accusative suffix *-ni* respectively, *gurram* 'horse', pl, *gurra:-lu*, accusative *gurra:n-ni*. The personal suffixes other than the 3rd non-masculine singular contain long vowels in the past and the future-

non-initial syllables. In Gondi, and Kolami (and presumably in Naiki too) vowels in non-initial syllables are invariably long (with minor exceptions) so that original short vowels are lengthened in this position. The following examples will serve to illustrate the shortening of original long vowels in the non-initial syllables in languages other than Tamil-Malayalam and Kota.

19. Ta. *e:ma:r* 'to be confused', *e:m:aɻu* 'to be beguiled', *e:ma:ɻɻu* 'to hoodwink', *e:ma:lɪ* 'simpleton'. Ma. *e:ma:lɪ* 'beggar, silly man'. Ko. *e:ma:r-* 'to gasp (from sudden fright, shock, while dying)', *e:ma:n-* 'to be cheated'. To. *e:mo:t-* 'to deceive'. Te. *e:maɻu* *e:ma:ɻu*, 'to be forgetful'; *e:ma:rincu*, *e:ma:ɻucu* 'to deceive'. (760).

20. Ta. *kaɳɳa:ti* (<*kaɳ + a:ti*) 'mirror, glass things'. Ma. *kaɳɳa:ti*, To. *koɳoɖy*, Ka. *kaɳɳaɖi*, *kanaɖi*. Kod. *kaɳɳadi*, Tu. *kaɳɳadi*, *kannaɖi*. (993).

21. Ta. Ma. *a:ra:y* 'to investigate'. Ka. *a:ray(u)* 'to search'. Tu. *a:raysu-* 'to expect'. Te. *a:rayu*, *arayu* 'to think, search' (319).

3.1.3. The various changes of the Proto-Dravidian vowels in the daughter languages as well as the alternation between long and short vowels will be discussed in the following chapters. The vocalic alternations among the various languages are explainable by regular rules only when the vowels belong to the word-initial syllable. In non-initial

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cum-habitual tenses, e. g. *cepp-ε:-nu* (< \**cepp-iy-a:nu*) 'I told', *cep-t-a:nu* 'I (will) tell'; this long vowel is elided after the negative *-a-* and the past subjunctive *-du-*, e.g. *cepp-a-nu* 'I will not tell', *cep-du-nu* 'I would have told'.

syllables, vowels undergo various changes including loss and they are not uniformly reconstructable to Proto-Dravidian in this position. Of the three vowels *a*, *i*, and *u* that occur at the beginning of the derivative element, the first one is more stable than the other two at least in the literary languages; therefore the rules given for the changes in vowels apply in most of the cases only to the vowels that occur in the word initial syllable.

### 3.2. Consonant Phonemes

3.2.1. The following consonant phonemes are reconstructable to Proto-Dravidian.

	Labial	Dental	Alveolar	Palatal	Retroflex	Velar
Stop	<i>p</i>	<i>t</i>	<i>t̪</i>	<i>c</i>	<i>t̪</i>	<i>k</i>
Nasal	<i>m</i>	<i>n</i>	<i>n̪</i>	<i>ñ</i>	<i>n̪</i>	<i>n̪</i>
Trill			<i>r</i>			
Lateral			<i>l</i>		<i>ɺ</i>	
Fricative					<i>ɻ</i>	
Semivowel	<i>v</i>				<i>y</i>	

3.2.2. In Proto-Dravidian the retroflex sounds *t̪*, *n̪*, *ɺ* and *ɻ* and the alveolar sounds *t̪*, *n̪*, *r* and *l* do not occur in the initial position of a word. However, they came to the word initial position in the Telugu-Kuwi subgroup due to metathesis (for details, see Chapter 16).

3.2.3. All consonants except *r* and *ɺ* can occur as single or double but these two are never doubled. The double consonants often undergo changes that are different from those of the corresponding single consonants and hence it is necessary to treat them separately. Similarly, the sequence NP (nasal+homorganic stop) undergoes special changes in some languages.

3.2.4. The velar nasal *n̪* occurs only before *k* in Proto-Dravidian as in many of its daughter languages. Therefore

it is not considered as a separate phoneme in Proto-Dravidian. However, it attained phonemic status in languages like Malayalam, Gondi, Konda and Pengo due to the simplification of the original sequence \**nk* to *n*.

3.2.5. There is compelling evidence in Old Tamil for considering the dental *n* and the alveolar *ñ* as originally separate phonemes. Therefore they are considered to be separate phonemes in this work (see for details Chapter 30).

3.2.6. Voiced stops were not phonemically different from the corresponding voiceless stops in Proto-Dravidian. However, in languages other than Tamil-Malayalam original voiceless stops have changed into the corresponding voiced stops in some cases (see for details, Chapter 20).

The above introductory remarks are intended to indicate the general pattern of the Proto-Dravidian consonant system. The developments of each individual proto-phoneme or phonemic sequence in the daughter languages will be discussed below in the relevant chapters.

### 3.3. *a:ytam* of Old Tamil

3.3.1. Old Tamil contained the peculiar consonantal sound called *a:ytam*, which can be represented with *h* the (symbol or it in the Tamil script is ::). Kuiper (1958, 1974) and Balasubramanian (1976) contain detailed accounts of this Old Tamil sound. *Folka:ppiyam* considers it as one of the three secondary sounds and states that its pronunciation depends on the following stop.<sup>1</sup>

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1. *avai ta:m kurriyalikaram kurriyakluaram a:ytam en̩ra muppa:t pul̩iyum elutto:r ayya.* “They (the secondary sound) are *i*, *i*, and :: which are represented by dots (in script)” *Eluttatka:ram sutra 2.*

It occurs only after a short vowel of the first syllable of a word and before a stop, which in turn is followed by a vowel (*ibid*, sutra 38).<sup>2</sup> It occurs within a word as in *eħku* 'steel, weapon', *eħkam* 'lance', *veħku* 'to desire ardently', *aħku* 'to diminish', *aħtai* 'name of the daughter of a Chola king', *pahri* 'boat', *kahcu* '½ *palam* (a weight)', *aħtu* 'belly', *aħtu* 'it' and *kahru* (*enəl*) 'an expression signifying blackness', as well as in external sandhi (according to *Tolka:ppiyam*) as the optional replacement of *l* or *t* or as the obligatory replacement of *v* (these must be preceded by a short vowel of the word-initial syllable).<sup>3</sup> It is said that in Sangam literature the *l* standing at the end of a word of the type (C)V*l* is regularly replaced by *ħ* before a word beginning with *t* (and this *t* is changed to *r*) but instances of the *l*

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*ca:rntu varin allatu tamakk iyalp ilaveṇat  
te:rntu ve:lippatutta ve:nai mānṭuṇ  
tattañ ca:rpi piṭappoṇ civani  
yotta ka:tciyiṛrammiyalp iyalum* (*Ibid*, sutra 101)

"The three secondary sounds, i.e. *i*, *ii* and *..* have the same organ of articulation as the consonant which stands as their support, i.e. the consonant which precedes them in the case of *i* and *ii* and that which succeeds in the case of *..*".

2. *kuṭiyatapu muṇnar a:ytappulli  
uyirotu puṇarnta valla:ṛan micaitte:*

"A:ytam is always preceded by a short vowel and followed by one of the six stops, which in turn is followed by a vowel".

3. *takaram varuvali ya:yta nilaiyalum  
pukar inṛ enmaṇa:r pulamaiyo:re:* (*Tolka:ppiyam*, *eluttatika:ram* sutra 370).

"Learned men say that there is no harm even if *l* is changed to *ħ* if the coming word commences with *t* e.g., *kal+ti:tu* → *kahṛi:tu/karr̩i:tu* 'the stone is bad (here *t* first changes to *r* after the *l* by an earlier rule).

changing to *t* before *t*, which is sanctioned by *Tolka:ppiyam* as optional, is totally absent. That is, there are instances like *koh̄ter* (<*kol+tēr*) ‘the killer chariot’, *pah̄riṇai* (<*pal+tiṇai*) ‘many classes’ and *pah̄takaippu* (<*pal+takaippu*) ‘many sections (of a house)’ but the other variants like *kōṭte:r* (sanctioned *Tolka:ppiyam*) do not occur. Moreover, in Sangam literature *l* or *v* is not replaced by *h* though such a replacement is sanctioned by *Tolka:ppiyam*. In individual words, the sequence *hP* is not always replaceable by *PP* although there is such a variation in a few cases like *pattu* and -*pah̄tu* ‘ten’ (as in *irupahtu* ‘20’ and other multiples of ten upto 90).

3. 3. 2. According to *Tolka:ppiyam*, the place of articulation of *h* depends on the following stop and therefore the modern practice of pronouncing it (while reading Old Tamil texts) as velar voiceless fricative [χ] before stops other than *k* cannot represent the original state of affairs. Most probably it was originally a voiceless fricative with the place of articulation depending on the following stop (see. P. S. Subrahmanya Sastri 1934: 66–68). Some of the modern scholars have assigned different phonetic values to it like non-linear feature, a special type of stress accent, glottal sound and even glottal stop but all these views lack confirmatory evidence.

3.3.3. Bh. Krishnamurti (1963: 557–558) proposes a new theory to explain Old Tamil *h* from the comparative point of view. According to him, it is “a relic reflex of a Proto-Dravidian

*ve:ṛṛumai yalvali ya:ytam a:kum.* (*Ibid*, sutra 380); “‘*v* is changed to *h* in non-case relation sandhi (if it is followed by a voiceless consonant)” e.g. *av+katiya*→*aḥkatiya*.

*a:yta nilaiyalum varainilai yinre:*

*takaram varuuṇ ka:lai ya:ṇa,* (*Ibid*, sutra 400)

“None prevents the optional change of *l* to *h* if the coming word commences with *t*,”; e.g. *muṇ + ti:tu muḥfi:tu / muṭṭi:tu* ‘the thorn is bad’ (here the *t* first changes to *f* after the *l* by an earlier rule).

laryngeal \*H'. Although the setting up of a laryngeal H in Proto-Dravidian explains, as claimed by Krishnamurti, the alternation between \*VCC and \*V:C in a large number of stems that goes back to the Proto-Dravidian stage itself (see 14.1.) the point that the Old Tamil *h* directly represents this laryngeal is still open to question. This is because Old Tamil *h* did not have a single place of articulation but its point of articulation depended on that of the following stop as noted above. Moreover, in sandhi of Old Tamil, *h* is a substitute of *l*, *t* or *v*; in such cases it cannot be an original sound. Finally, it must be said that there is scope for further work on the problem of Old Tamil *h* and on the suggestion of Krishnamurti regarding its origin.

### 3.4. Tables of phonetic correspondences

Tables 1 to 4 give the reflexes of Proto-Dravidian phonemes and some phoneme sequences with as much detail regarding conditionings as possible.

#### Notes:

1. In the languages (or dialects) other than those given in Table 1, the PDr. vowels remain unchanged.
2. Sounds remain unchanged in environments other than those specified. Blanks also indicate absence of change.
3. A dash means that the correspondence is not known.
4. Dialectal variation is indicated by a slash.
5. Sporadic voicing of word-initial stops (in languages other than Ta., Ma. and To.) is not represented.
6. In the case of PDr. stops, blanks stand for the sounds given, if any, in square brackets along with them; but in the case of Ta. and Ma., they represent the proto-sound at the phonemic level in such cases.

7. In many languages other than Ta., Ma., Ko. and Te., \*PP is represented by PP after an initial short vowel but by P elsewhere.
8. In Ka., \*m > v / V<sub>1</sub> —  
      > φ / V<sub>2</sub> — ≠
9. In Old Te.. \*V : N  $\begin{bmatrix} \text{PP} \\ \text{P} \end{bmatrix}$  > (often)  $\overset{\sim}{\text{V}} : \begin{bmatrix} \text{P} \\ \text{B} \end{bmatrix}$ ; similarly  
V<sub>2</sub>, ... N  $\begin{bmatrix} \text{P} \\ \text{B} \end{bmatrix}$  < (optionally)  $\overset{\sim}{\text{V}}_2, \dots \begin{bmatrix} \text{P} \\ \text{B} \end{bmatrix}$ ; the nasalisation is lost in Modern Telugu.
10. A reflex given in parentheses in the case of Ko. and Te. occurs in loanwords.
11. \*p > \*v / V — V.
12. Frequently \*c > y / V — V, and V<sub>1</sub> y > V<sub>2</sub> / — (V<sub>2</sub>) C
13. In the Tamil-Toda subgroup, \*Dental > Palatal / { \*<sup>i</sup><sub>y</sub> } — (see 26-5).
14. In Te., w > φ / { p<sub>m</sub> } —.
15. Abbreviations:
 

Alv. = Alveolar;	N.F.V. = Non-frnnot vowel;
B = Voiced Plosive;	P. = Voiceless Plosive;
C = Consonant (single);	Pal. = Palatal;
F. V. = Front Vowel;	R = Retroflex;
H. V. = High Vowel;	R <sub>1</sub> = Retroflex (single).
L. = Labial;	

P. Dr.	Ta. Ma.	Ked	Ke.	To.	Ka.	Tu.	Te.	Go. (Tr.)	Mand.	Pa.	Br.
*a				$a/-\left\{ \begin{array}{l} \text{Non-nasal} \\ \text{alv.} \\ \left\{ \begin{array}{l} *ay \\ R_1 *a \end{array} \right. \end{array} \right\}$						$e/-\text{Alv.}$	
				<b>o elsewhere</b>							
*a:				$a:/-*ay$						$e:/-\text{Alv.}$	
				<b>o: elsewhere</b>							
*i	$u/L-\left\{ \begin{array}{l} R \\ *t \end{array} \right\}$	$e/-C*a$	$i/-\text{consonants}_v$	$e/-Ca$	$u/L-R$	$e/-Ca$					
		$y [\text{in non-}]$	$\text{other than } c, c, s$			$e/-Ca$					
	$i/-\left\{ \begin{array}{l} R \\ *t \end{array} \right\}$	$\text{initial}$	$*e/-C*a$								
		$\text{syllables}]$	$y [\text{in non-initial}]$								
		$e/-Ca$	$\text{syllables}]$								
*i:	$u:/L-\left\{ \begin{array}{l} R \\ *t \end{array} \right\}$				$u:/L-R$						
	$i:/-\left\{ \begin{array}{l} R \\ *t \end{array} \right\}$										
*u	$e/-Ca$	$e/-*C*a$	$u/-\left\{ \begin{array}{l} i \\ *y \\ *cc \end{array} \right\}$	$e/-Ca$	$e/-Ca$	$e/-Ca$					
		$i/-*C*Cay$									
			$i/ \left\{ \begin{array}{l} \text{labial} -*a \\ \text{-labial} +*a \end{array} \right\}$								
			$u/-\left\{ \begin{array}{l} *C[Cu] \\ *u \end{array} \right\}$								
			$*e/-Ca$								
*u:		$i:/-*ay$									
*e	$i/-Ca$	$a/C-R*a$	$e/-\text{Alv.}$	$i/-C+H.V.$	$e/L-R$	$a$	$a[\text{rarely}]$	$a,$			
		$o/L-\left\{ \begin{array}{l} R \\ *t \end{array} \right\}$	$\ddot{o} \text{ elsewhere}$								
		$\ddot{e}/-\left\{ \begin{array}{l} R \\ *t \end{array} \right\}$	$i, i/-\left\{ \begin{array}{l} y \\ \text{Pal.} \end{array} \right\}$								
e:		$e:/L-\left\{ \begin{array}{l} R \\ *t \end{array} \right\}$	$e/-\left\{ \begin{array}{l} i \\ y \end{array} \right\}$		$e:/L-R$		$e:[\text{rarely}]$				
		$\ddot{e}/-\left\{ \begin{array}{l} R \\ *t \end{array} \right\}$	$\ddot{o}: \text{ elsewhere}$								
*o	$u/-Ca$	$e/-*ay$	$wa/-\left\{ \begin{array}{l} \text{Non-nasal} \\ \text{alv.} \\ *ay \end{array} \right\}$	$u/-C+H.V.$		$a$	$u$			$a,$	
			$wi \text{ elsewhere}$							$u,$	
			$[w \rightarrow \phi/p-]$							$\emptyset$	
*o:		$e/-*ay$	$wa:/-*ay$				$u:$				
			$wi \text{ elsewhere}$								

Table 1. Changed Reflexes of PDr. Vowels.

PDr.	*k-	*-k-[g]	*kk	*ñk [ng]	*c-	*-c-[s]	*cc	*ñ ñj	*t [d]	*tt	*nt [nd]
Ta.	c[F.V. + -R]				c,φ						
Ma.	c[F.V. + -R]			ñ, ññk	c,φ			ññ, ñj			
Kod.					c,φ	j		ññ, ñj			
Ko.			k	g, (ng)	c,φ		c		r	t	d, (nd)
To.	x		k	V <sub>1</sub> ]g, x, (g)	t,φ (s)		c	z,	r, (d)	t	d
Ka.				V <sub>1</sub> ]ng, g	c, s, φ						V <sub>1</sub> ]nd,
Tu.	c [F. V.	y			s, φ	j		ñj, ññ			
Te.					c, φ						
Go.			y		s/ (SE)h/ (Ko.)φ				r/r		
Konda			k	ñ	s		s		r, t	t	
Pe.			k	ñ(g)	h	h	c		d, z	t	
Mand.			k		h	h	c		r	t	
Kui			k		s	s, h	s		C]r, d, j	t	
Kuwi		y	k		h	h	cc.c		r, y	t	
Kol.			k		s				(Kin) r		
Nk. (Ch.)			k		s				r		
Pa.	g, v, y		k			y		ñ(j)			
Ga.			k		(O) s/ (S) s, c	y		ñ(j)	r, rr		
Kur.	k[H.V., x	x	V <sub>1</sub> ] x, kk, kh	x, ñx, ñg		s, j			r	tt, t	
Malt.	k[H.V., q	G	q, k	G, nq, ñG		s, j	c		r	t	
Br.	k[i, i:, x	x	kk, xx	ng, GH			s, sh	—	r, r, rr	t	

Table 2. Changed Reflexes of PDr. Stops — 1.

PDr.	*t [t]	*tt	*p t	*-t-[d]	* tt	*nt [nd]	*p-	*pp	*mp [mb]	*NPP
Ta.		rr				nn,nd				PP
Ma.			nn							PP
Ko <sup>d</sup> .	r	tt	nd							PP
Ko.	r	t	V: <sub>1</sub> ]nd, d		t	d		p	b	PP
To.		t	d	θ	t	V <sub>1</sub> ]d, θ		V <sub>2</sub> ]f, p	b	PP
Ka.		tt	V <sub>1</sub> ]nd, t			V <sub>1</sub> ]nd, d	p> h>φ		V <sub>1</sub> ]mb, v	NP
Tu.	d,j,r	tt	nd, nj [i							NP
Te.		tt	nd, nd						V:]m, mm	NP
Go.	r/r/r	tt	V:]nd/nd, dd					p	m	PP
Konda		R	V:] r, n <sub>1</sub> t					p	m	PP
Pe.	z	cc,c	nj					p	m	P
Mand.	y	cc,c	nj					p	m	PP
Kui	C]r, j	s	nj,j							PP
Kuwi	r,y ?	cc,c	nj,j						m,mb	PP
Kol.	d,r	tt,t	nd					p	m	NP
NK. (Ch)	d,r	tt,t	nd					p	m	NP
Pa.	d/ (NE)d	tt,t/ tt,t	nd/ nd			V <sub>1</sub> ]nd, d			m(b)	NP
Ga.	y	tt,t	nd			V <sub>1</sub> ]nd, d		p	m(b)	NP
Kur.	s,ss	tt,t	nd	d,θ						NP
Malt.	r,rr	tt,t	nd	d,θ	t			p		NP
Br.	r,rr	t	s		t	—		p		NP

Table 3. Changed Reflexes of PDr. Stops — 2.

PDr.	*n̩	*n̪	*n̫	*ya:-	*-y(-)	*r	*l	*ll	*l̩	*ll̩	*v-	*-v-	*l̩
Ta.	n̩ > n			ya:>a:									
Ma.				a:									
Kođ.	n, n̩			a:							b		y/a-*i, l/V-V, ϕ/C
Ko.	n			a:			li>j	l, lli>j		l			y[≠, ϕ[g, k, r[l, r, (l)]
To.	n			*a:		s[t(t) F.V.+C, s[N-F.V., ϕ/V—V, r	s, L, (l)	s, (l)	L, (l)	L	p	f	*r [t,k] w[≠, ϕ/V-V d,r,y, (*l)
Ka.	n			a:							b		l > r [C, l]
Tu.	n	(C) n		a:, e:						(C) l	b	b,v	(B) l, (C) r
Te.	n	n		e:		(Mod.) C] ϕ			l	ll			l > C r, d
Go.	n	n		e:		r/r			l	ll			r
Konda	n			e:, a:					r	l			r
Pe.	n			e:, a:					r	l			r
Mand.	n			e:, a:					r	l			r
Kui	n	n, n̩		e:, a:	j		C] l, d	d /l	C] l, d /l	-			r
Kuwi	n	n		e:, a:			r		r	-			r
Kol.	n	n		a:					l	ll			r
Nk.(Ch)	n	n		a:						ll			y, ϕ
Pa.	n	n		a:					l	ll			r
Ga.	n	n, n̩		a:					l	ll			(O) r/ (S) d
Kur.	n	n		e:					l	ll	b	b,v	ϕ, r, d, r
Malt.	n	n		e:					l	ll	b	w	ϕ, r, d, i
Br.	*n	n	d[F.V. n	-	-	r, rr	L, l		L, l	ll	b	f, v	r, rr, r, l, ϕ

Table 4. Changed Reflexes of PDr. Non-stops.

## **II. VOWELS**

#### 4.1. Reflexes

4.1.1. PDr. \**a* remains as *a* in all the languages except Toda and Parji. Toda retains *a* under certain conditions but changes it to *o* otherwise (see 4. 2.) while Parji changes it to *e* under certain conditions and shows no change otherwise (see 4.3). The following are the examples:<sup>1</sup>

23. Ta. *arai* 'half'. Ma. *ara*, To. Ko. *ar*, Ka. *are*, Tu *are*. Te. *ara* (192)

1. For every Proto-Dravidian phoneme, a set of standard examples with cognates from as many languages as available (taken from *DED(S)* and *DEN*) is given. Although it is seen that each available language is represented in these, no attempt is made to reproduce the *DED(S)* and *DEN* entries in their entirety. On the other hand, discussions of the developments of a particular original phoneme in a specific language or languages contain cognates only from one or two related languages that do not show that particular change. This is done with a view to avoid unnecessary details that are not relevant to the point at issue. All etymological groups given as examples, whether detailed or otherwise, are numbered consecutively to facilitate cross reference. Numbers preceded by the word "example(s)" refer to the examples in this book. Numbers given after a set of cognates refer to the entries of *DED(S)* and *DEN* unless otherwise stated.

24. Ta. *kaṭa* (*kaṭapp-*, *kaṭant-*) ‘to pass through, cross, exceed, overcome’, Ma. *kaṭa*. To. *kaḍ-* (*kaḍθ-*), Ko. *kāṛv-* (*kāṛd-*) Ka. *kaḍe*. Koḍ. *kaḍa-* (*kaḍap.*, *kaḍand-*). Tu. *kaḍa-*, Te. *kaḍacu*, *gaḍacu*. Pa. *kaḍp-* (*kaḍt-*). Ga. (Oll). *karp-* (*kart-*), Konḍ. *garvi-* (-*t*-), Kur. *kaṭṭ-* Malt. *kaṭ-*. Br. *xarr-*. (929)

25. Ta., Ma. Ka. *kan*, ‘eye’, Ko. *kan*. To. *kon* Koḍ. *kannī*, Tu. *kannī*, Te. *kanu*, *kannu*. Kol. *kan* (pl. *kanḍl*). NK. *kan* (pl. *kanḍl*), Nk. (Ch.) *kan* (pl. -*l*), Pa. (S) *kan* (pl. -*ul*), Ga. (Oll). *kan* (pl. -*kul*), (S) *kanu* (pl. *kankul*), Go. *kan* (pl. -*k*) (A) *kar* (pl. -*k*), Konḍa *kan*. Pe. *kanga*. (pl. -*n*, *kan-ku*), Mand. *kan* (pl. -*ke*). Kui *kanu* (pl. *kan-ga*). Kuwi (Su. P) *kanu* (pl. *kanķa*). Kur. *xann*. Malt. *qanu*. Br. *xan* (pl. -*k*). (97 a).

26. Ta. *paṇ*, *paṇi* ‘work’, *paṇṇu* (*paṇṇi-*) ‘to make’. Ma. *pani* ‘work’, *paṇi-* ‘to build’. To. *paṇy* ‘work’. Ka. *paṇṇu* ‘to prepare’. Koḍ. *paṇi* ‘work’, Tu. *paṇi-* ‘to shape (a vessel)’. Te, *pani*, (inscr.) *paṇi* ‘work’, *pannu* ‘to contrive, plan’; *panucu* ‘to send on assignment’. Kol. (A) *pani* ‘work’. Pa. *panḍp-* (*panḍt-*) ‘to make, do’. Ga. (Oll.) *panḍ* – to be able’, Go. *paṇi*, *paṇi* work’ *panḍ-* ‘to make, build’. Konḍa *pani* ‘work’; *panḍ* – ‘to prepare’. (3209).

27. Ta. *pal* ‘tooth’. Ma. *pal*, *pallu*, To. *paṣ*. Ko. *pal*. Ka. *pal*, Koḍ. *palli*. Tu. *paru*, Te. *palu*, *pallu* (pl. *paṇḍlu*) (Mod.) *pannu* (pl. *pallu*). Kol. Nk. (Ch.) *pal*, Pa. *pel*, Ga. (Oll) *pall*; (S) *pallu*, Go. Konḍa *pal*, Kui *paḍu*, *pallu*. Kuwi *pallu*. Ku r *pall*, Malt. *palu*. (3288)

8. Ta. *paṇṭi* ‘pig’, Ma. *panni*, To. *pody* (< Old Ka.) Ko. *paj*. Ka. *pandi*, *handi*, Koḍ. *pandi*. Tu. *paṇji*. Te. *pandi*. Pa. *pend*, (NE) *pend*. Ga. (Oll.) *panḍ*, (S) *panḍu*. Go. *paddi*, Konḍa *panṭi*. Pe. Mand. *panji*. Kui. *paji*. Kuwi *pajji*. (3326).

29. Ta. *māṇru* 'hall of assembly, raised platform under a tree for village meetings etc'. Ma. *mānnu* 'place of judgement or assembly'. To. *moḍ* (oblique stem *moṭt*) 'locus of tribal activity, including village with dairy, dairy apart from village and funeral place; patrilineal clan', Ko. *manḍ* 'burning place for dry funeral; Toda village'. Ka. *mandu* 'Toda hamlet'. Kod. *mandī* 'village green'. (3913)

30. Ta. *varu* (*va:r-*, *vant-*) 'to come'. Ma. *varu* (*va:r-* *vann-*) To. *po:r-* (*pa-*, *paś-*, *pod-*). Ko. *va:r-* (*va-*, *vad-*). Ka. *bar*, *ba:r* (*band-*). Kod. *bar-* (*bapp-*, *band-*). Tu. *bar-* (*batt-*). Te. *vaccu*, *ra:-*. Kol. *var-* (*vatt-*). Nk. *var-*, Nk. (Ch.) *var-/va-* (*vat-*). Pa. *ver-* (*veñ-*). Ga. (011.) *var-* (*vad-*, *van-*); (S), *va:r-* (*vadd-*, *vann-*; imperative sg. *var*). Go. *va:* (*va:t-*; imperative sg. *vara:*). Kui *va:-* (*va:t-*; imperative sg. *va*, *va:mu*) Kur. *bar-*, Malt. *bar-*, Br. *bann-* (*bar-*, *ba-*, *bass-*). (4311).

31. Ta. *varu* (-*tt-*) 'to fry'. Ma. *varu-*. To. *parf-* (*part-*), Kod. *bara-* (-*t-*). Pa. *vedp-* (*vedt-*). Go. *vah-*. Konḍa *vat-* (*vaRt-*). Pe. *vah-* (*vast-*). Mand. *vahpa-*. Kui *vah-* (*vaht-*), Kuwi *vah-* (*vast-*), (4360).

#### 4.2. PDr. \*a > To. a/o.

4. 2. 1. The conditioning factors for the two developments (i. e. *a* and *o*) of PDr. \*a (and also of PDr \*a:) in Toda, which were not known for a long time, have been given in P. S. Subrahmanyam 1976. The rules which apply for the PDr. \*a occurring in the word-initial syllable, are as follows.

PDr \*a > To. a

- (i) before one of the non-nasal alveolar consonants \*r, and \*t and \*l;
- (ii) before \*-ay in the next syllable; and

(iii) before a single retroflex consonant  
 [\**t*, \**l* or \**ɻ*] which is followed by \**a*;  
 > To. *o* elsewhere.

Examples:

$$[\text{i}] \quad \text{PDr. } *a > \text{To. } a / - \left\{ \begin{array}{c} *r \\ *t \\ *l \end{array} \right\}$$

32. To. *ark-* (*arky-*) 'to chip': Ta. *ari* 'to cut off' [175]  
 33. To. *as̍ky* 'rice': Ta. *ari* (*ci*), Ka. *akki* [178]  
 34. To. *nary* 'jackal': Ta. Ma. *nari*. [2981]  
 35. To. *paθ* 'eagle, vulture': Ta. Ma. *paruntu* 'kite'. [3281]  
 36. To. *aṛy-* (*aṛs-*) 'to know': Ta. Ma. Ka. *ari* [265]  
 37. To. *maṛy* 'young of animals [except buffaloes] and birds'  
       : Ta. Ma. *maṛi* 'young of animals' [3901]  
 38. To. *alx-* (*alxy-*) 'to shake [intr.]', *alk-* (*alky-*)  
     'to shake [tr.]': Ta. *alaṅku* [intr.], *alakku* [tr.]. [203]  
 39. To. *kaL-* [*kaṭ-*] 'to learn': Ta. Ma. Ka. *kal*. [1090]  
 40. To. *kaṣ* 'stone': Ta. Ma. Ka. *kal*, [1091]  
 41. (=27) To. *paṣ* 'tooth': Ta. Ma. Ka. *pal*. [3288]  
 42. To. *paṣof* 'jack-fruit': Ta. *palavu*, *pala*: [3290]  
 43. To. *paṣy* 'lizard': Ta. Ma. *palli*. [3294]

(ii) PDr. \**a* > To. *a* / - \**ay*

44. To. *af*, *afuf*, 'mother': Ta. *avvai*. [232]  
 45. To. *kay-* (*kayθ-*) 'to churn': Ta. *kaṭai*. [957]  
 46. To. *af-* (*aft-*) 'to pound with light strokes': Ta.  
     *avai* 'to pound in a mortar' [1976; note To. *ofil*  
     'puffed rice', l.w. < Ta. *aval*, Ma. *avil*].  
 47. To. *nay* 'step, style of walking': Ta. *naṭai*. [2957]  
 48. To. *nan* 'leaf-sheot': Ta. *naṇai* 'flower bud'. [3007]

49. To. *mad* 'head', : Ta. *maṇṭai* 'head, skull'. [3831]

50. To. *maw* 'rain' : Ta. *maḷai*. [3893]

51. To. *man* 'family, household' : Ta. *maṇai*. [3911]

52. To. *pax-* (*paxθ-*) 'to be divided', (*paxt-*) 'to distribute', *paxy* 'division' : Ta. *pakai* 'to hate, oppose'; n. 'enmity', [3154; To. *ax* 'hostility' must be a loan from Badaga; also note that To. *pa:p* 'hoof' [given in *DEDS* 3364 Te. *pa:yu* 'to separate' with a query] seems to be derived from \**pakaypp*; cf. M. *pakappu*].

(iii) PDr \*a > To. *a/* - Retr. + \*a.  
 [Retr = a single retroflex consonant]

53. To. *as* 'heat of sun or fire' : Ta. Ma. *aḷal* 'heat, fire'. [234]

54. To, *aL-* (*aLθ-*) 'to measure', *aLt-* [obl.] 'measure' : Ta. *aḷa* (-*ni*) 'to measure'. [252]

55. To. *kaḍ-* (*kaḍθ-*) 'to leave, pass, cross', *kṛt-* (*kṛty-*, < \**kaṭatt-*) 'to take across'; *kaḍf-* 'path' (< \**kaṭav*), *kaḍ* 'a stride' (< \**kaṭavay*), *kaḍc* 'end [of thing, event]' [< \**kaṭayci*] : Ta. Ma. *kaṭa*, Ka. *kaḍe* [929; note To. *koḍf* 'stipulated period of agreement' < \**kaṭu(vu)*, To. *kory* 'fixed period' < \* Ka. *gadi*].

56. To. *ka.l-* (*ka:d-*) 'to fall from height', *ka:t-* (*ka:ty-*) 'to make to fall from tree' : Ta. Ma. *kaṭal* 'to become loose, slip', tr. *kaṭattu*. [1136].

57. To. *nay-* (*nayθ-*) 'to walk, happen', *nari-* (*nary-*) 'to make to walk, string beads' [< \**naṭattu-*]; *naḍ-* (*naḍθ-*) 'to happen'. *naḍt-* (*naḍty-*) / *naḍc-* (*naḍc-*<sup>v</sup>) 'to organize' : Ta. Ma. *naṭa* 'to walk', tr. *naṭattu*. [2957]

58. To. *pa:w*, *pa:-* (before consonants) 'old', *pa:fn* 'old [of things]' : Ta. *pala*, *palai(ya)* 'old'. [3296]

59. To. *pa:g-* (*pa:gy-*) 'to use [things, path]', *pa:k* 'path, track' : Ta. *palaku* 'to be used', *palakkam* 'use, habit' [3296]

60. Ta. *pan* 'fruit' [in song] : Ta. *palam*. [3299]

Unlike in the above cases, PDr \**a* changes to *o* if it is followed by a cluster of retroflex consonants even when it is followed by *a*; see examples 75 to 80.

Examples 81 to 84 seems to go against the conditioning given above. The only explanation that can be given for this at present is to say that the loss of the \**a* of the second syllable in these took place prior to the change of \**a* > To. *o* while in the other cases it took place after the completion of the change.

4.2.2. PDr \**a* > To. *o* [in the environments other than those described above].

61. To. *oz,- (oj-)* 'fear'. : Ta. Ma. *añcu*. [51]

62. To. *or- (ory-)* '[child] weeps' : Ta. Ma. *alu* [240]

63. To. *olb* 'animal's den, cave' [given in 261 Ta. *ałai* 'hollow in tree, cave'. If this connection were correct, \**a* could not have changed to To. *o* because of the following \*-ay. Therefore, this Toda word should be shifted to 853 Ta. *olivu* 'place of concealment'. ].

64. [= 25] To. *kon* 'eye'. To. Ma. Ka. *kap*. [973].

65. To. *kopol* 'boat' l.w. < Ta. Ma. *kappal*. [1022]

66. To. *konof* 'dream' : Ta. *kapavu*, *kana:*. [1184]

60. To. *kor* 'female buffalo calf below one year' : Ta. *kanru* 'calf', Ka, *karu(vu)*, *kara* [1187]

68. To. *nök-* (*noky-*) 'to lick' : Ta. *nakku*. [2945]

69. (= 966) To. *poxel* 'day time', : Ta. *pakal*. [3151]

70. [= 26] To. *pony* 'work'. Ta. Ma. *pani*. [3209]

71. To. *pop* 'a boil' [given in 3277 Ta. *paru* 'to become large'; since \*a does not change to o before \*r, this should be shifted to 3648 Ta. *pokuṭu* 'bubble'; Ka. *bobbe* 'blister', Te. *bobba*.]

72. To. *pony* 'dew'; Ta. Ma. *pani*, [3322]

73. [=28] To. *pody* (< Old Ka.) 'pig', : Ta. *panṭi* [3326]

74. [=29] To. *moḍ* [obl. *moṭṭi-*] 'locus of tribal activity' : Ta, *maṇṭu* 'hall of assembly'. [3913]

75. To. *kotas* 'noose' : Ka. *kattal* 'state of being bound', [961]

76. To. *koḷṇ* 'thief' : Ta. *kaḷlaṇ* [1156]

77. To. *oṭm* 'place for firewood' : Ta. Ma. *aṭṭam* 'terraced roof'. [83]

78. To. *poḷm* 'a bamboo vessel' : Ta. Ma. *vallam* 'a dish, large bamboo basket'. [4350]

79. To. *kodṇ* 'Baḍaga husband' : Ta. *kapṭan*. [986]

80. To. *koṇodyy* 'mirror' : Ta. Ma. *kaṇṇaṭi* [993]

81. To. *koṛṇ* 'loan' : Ta. *kaṭan* [934]

82. To. *koḷṇ* 'threshing floor' : Ta. *kaḷan* [1160]

83. To. *oḍg-* (*oḍgy-*) 'to be quiet', *ork-* (*orky-*) 'to subdue'. *oḍkm* (obl. *oḍkt-*) 'submission'. ; Ta. *aṭaṅku* 'to submit' *aṭakku* : 'ot control', *aṭakkam* 'submission' [56a].

84. To. *moryx-* (*moryxy-*) 'to bend (intr.)', *mork-* (*morky-*) 'to fold [tr.]', *moryk* 'a fold' : Ta. *maṭaṅku* 'to be bent', *maṭakku* 'to bend', *maṭakkam* 'subjection' [3796; since \*a is retained in Toda if it is followed by the sequence, retroflex +\*a these Toda words have to be grouped with 4028 Ta. *muṭanku* 'to bend', etc.]

4.2.3. The following Toda words [excepting those in 85], in which a PDr. \*a is retained as a although the conditioning

factors given above are not present, are loans from the neighbouring major languages. They must have been borrowed by Toda after the completion of the change PDr \**a* > *o*.

85. The distant demonstrative base \**a-* in *aθ* 'that person or thing', pl. *aθ-a:m* [1] has remained unchanged in Toda in all cases; in *a!* 'in that direction', *al* 'in that place' and *agn* 'from that direction', it need not change to *o* because it is followed by an alveolar consonant. It did not change in the other words also perhaps on the analogy of these forms.

86. In the case of the reflexive pronouns, \**ta:n* [2612] changed to *te:n* 'onself' as expected but \**a* did not change to *o* in its oblique base *tan-* (< \**tan-*) as well as well as in the corresponding plural *tam* [oblique *tam-*, 2852; the original oblique base has replaced the original absolute form with a long vowel in this case]. No explanation can be given for this anomaly at present; these forms are probably borrowings from one of the neighbouring languages.

87. To. *kak-* (*kaky-*) 'to vomit', *kakc-* (*kakc-*) 'to make to vomit' < Ta. *kakku* 'to vomit'. [909].

88. To. *kasp-* (*kaspy-*) 'to break rules of the sacred dairies', *kaspil* 'transgression of dairy rules'; Ko. *kacp-* (*kacpy-*) 'to be exposed to pollution', *kacpl* 'pollution'. [916b].

89. To. *kaðoŋm* 'reins' < Ta. *kaṭiva:lam* 'horse's bit, bridle' [950]

90. To. *katy* 'ass'. < Ka. *katte*. [1149]

91. To. *anil* 'squirrel' < Ta. Ma. *anil* [1911]

92. To. *mak* *θot-* 'to become senseless' < Ta. *makku* 'sluggishness, dullard', cf. Ko. *mak(l)* 'state of unconsciousness' [3890]

93. To. *past* 'lichen-covered flat rock or shelf on cliff' [ $<^*$  pacitt] : cf. Ta. *pacitu* 'that which is green', *paittu* 'greenness'. [3161]

94. To. *kaṭy* 'log' < Ka. *kattiyē* 'piece of wood' [DBIA 68]

95. To. *naxy* 'jewel' < Ta. *nakai*. [DBIA 221]

96. To, *paḍm* 'picture' < Ta. *paṭam*, [DBIA 240a]

97. To. *pak* 'side' < Ta. *pakkam*, [DBIA 233a]

98. To. *paty* 'cigar' : Ka. *batti* [ DBIA 252]

99. To. *tagas* 'chain' < Ta. *caṅkili*. [DBIA 131]

4.2.4. Original \*a of the second syllable is normally lost; in the few cases in which it remains in Toda, it changes to o even before l [ $<^*$  l] [see examples 42, 65, 66 and 69; in 42 and 66, the original vowel in the second syllable is long a: rather than a]. However, in two cases, i.e. in the examples 75 and 99, \*a remains as a before s which is from \*l. Moreover, in a number of instances \*a of the second syllable changes to i in Toda before a final l or !; because of the presence of the latter sound, all these words must be considered as loans [see examples 100–112.]

100. To. *ō:fil*, *e:fil* 'a command' : Ta. *etval* [771]

101. To: *ko:fil* 'watching' : Ta. *ka:val* [1192]

103. To: *kubil* 'herd' : Ta. *kumpal* [1449]

103. To, *ku:sil* 'a heap' : Ko. *gucl* 'heap of fuel' [1558; this entry may be merged with 1449 Ta. *kumi*, *kuvi* 'to crowd'; cf. Ta. *kuviyal* 'heap' ].

104. To. *kwarcil* 'a lack' : Ta. *kuṭaiccal*. [1537]

105. To. *kwifil* 'stammerer' : Ta. *kutalai* 'lisp'. [1418]

106. To. *kwiz,il* 'ridicule' ; Ta. *koñcal* 'childish prattle' [1697]

107. To *mixil* 'remainder' : Ta. *mikal* [3962]

108. To. *moθil* 'valuable thing' : Ta. *mutal* 'beginning' [4053]
109. To, *ofil* 'puffed rice' : Ta. *aval* [1976]
110. To. *o:fil* 'desire to eat' : Ta. *a:val.* [337]
111. To. *taθgil* 'hindrance' : Ta. *taṭukkal.* [2460]
112. To. *wiki!* 'family within clan' : Ta. *okkal* [782]
113. To. *kubil kɔ:y* 'pumpkin' : Ta. *kumpaḷam.* [1455]
114. To. *tigil* 'moon' ; Ta. *tiṇkal* [2626]
115. To. *obely* 'watery mess of rice, *ra:gi*, etc.' : Ka. *ambali* [146]

[In example 115, Toda contains *e* corresponding to \**a*; M.B. Emeneau points out [in a private communication] that in Toda there are no consonant clusters with *l* as the second number].

For statements of phonetic motivation, relative chronology and related matters, see 5.2.

#### 4.3. PDr. \**a* > Pa. *a/e*.

4.3.1. The conditioning factors for the different developments of PDr \**a* in Parji were also not known for a long time. In a recent paper [1978b], Bh. Krishnamurti has given the solution for this problem. The rule is as follows [the same rule operates also in the case of the long \**a:*, see 5.3].

PDr \**a(:)* > Pa. *e(:)* /- \*Alveolar [of pre-Parji]  
                  > Pa. *a(:)* elsewhere

4.3.2. Pre-Parji contained the following alveolar consonants, \**t* [θ], \**tt*, \**nθ* [nθ], \**y*, \**r*, and \**l*. After the operation of the above rule in pre-Parji, the alveolar stop \**t* was eliminated from the language; it merged with the dental stop in the North Western and Southern dialects but with the retroflex stop in the North Eastern dialect [i.e. \**t* > (NW&S)*d*/

(NE)*d*, \**yf* > (NW&S) *nd*/ (NE) *nd* and \**ff* > (NW&S)*t(t)*/ (NE) *t(t)*. [The alveolar nasal before it also has undergone similar changes.]

Since the change of PDr \**a(:)* > Pa. *e(:)* does not take place before *l* and *n* which are derived from PDr \**l* and *n* respectively [see examples 133–135; 197 and 198] we have to conclude that the two retroflexes were present in the language when the above rule operated. They must have merged with the corresponding alveolars after the above vowel change has ceased to operate.

“The phonetic motivation for the vowel shift seems to be that the raised position of the tongue in the front part of the oral tract in the articulation of the alveolar consonants results also in the raising of the low vowel to mid-position anticipatorily” (so. Krishnamurti 1978b : 255–256).

#### Examples:

- i) PDr \**a* > Pa. *e* / - Alveolar (of pre-Parji)
- 116. [=1066] Pa. *medi* (pl. *medul*) ‘mango’ ; Konḍa *maRka*. [3907]
- 117. [=31] Pa. *vedp-* (*vedt-*) ‘to fry’: Ta. *vaztu* ‘to be fried’ [4360].
- 118. Pa. *vered* ‘flood’ : Te. *vazada* ‘flood, torrent, inundation, deluge’ (4358)
- 119. Pa. *vett-* (NE) *vetti-* ‘to wither’, *vetip-* (*vetit-*) ‘to do, (tr.)’ : Ta. Ma. *vattu* (*vatti-*) ‘to grow dry, evaporate’. Te. *vatti* ‘to go dry (cow)’ [4355a]
- 120. Pa. *tend* ‘father’ < PCDr. \**tanfi*; Te. *tandri* Kui *tanji* Kuwi(S) *tanji*. (2494).
- 121. [=28] Pa. *pend*, (NE) *pend* ‘pig’ : Ta. *panti*, *vanti* (3326).
- 122. Pa. *men-* (*mend-*, *mett-*) ‘to be, stay’ : Ta. *mannu* (*manni-*) ‘to be permanent’, Te. *manu* ‘to live’. (3914).
- 123. Pa. *kel* ‘stone’ : Ta. Ma. Ko. Ka. *kal* (1091)

124. (= 791) Pa. *tel* 'head' : Ta. *talai*. (2529)

125. Pa. *kerdi* 'pigeon pea, *Cajanus indicus*' : Te *kandi* (1019)

126. Pa. *ker-*, (S) *kerv-* 'to burn (intr.)' ; *kerip-* (*kerit-*) , (S) *kervip-* (*kervit-*) 'to burn (tr.)' : Ga. (S) *karid-* 'to burn away as rice'. Go. *karu:-* 'to burn (intr.)'. (1073a)

127. (= 1093) Pa. *nerub* (pl. *nerbul*) 'vein' : Ta. *narampu*. (2364)

128. (= 30) Pa. *ver-* (*veñ-*) 'to come' : Ta. *varu*. (4311)

[ii] PDr. \**a* > Pa. *a* / - Non-alveolar consonant (of pre-Parji)

129. Pa. *akka* 'mother's father' : Go. *akko*: (25)

130. Pa. *kađp-* (*kađt-*) 'to cross', *kađ-* (*kađt-*) 'to throw (normally used as aux. vb.)' : Ta. *kaṭa* 'to pass through'. (929)

131. Pa. *katt-* 'to cut down (tree), slaughter, sacrifice' : Kol. *katk-* (*katakt-*) 'to strike down (man), break down (trees)' (1015)

132. Pa, *kaṭṭ-* 'to tie, build', *kađk-* 'to tie, fasten, bind' : Ta. Te. *kaṭṭu* 'to tie, build'. (961)

133. Pa. *alk-* 'to sprinkle' : Nk. *ałk-*. (258)

134. Pa. *kali* 'threshing floor' : Ta. *kałam*, *kałay* 'threshing floor, battle field'. (1160)

135. (= 25) Pa. *kan* 'eye' < PDr. \**kaṇ* (973)

4.4. PDr. \**a* > Iruña *e* / - *e* (< \**ay*)

4.4.1. In Iruña PDr. \**a* changes to *e* before *e* which comes from \**ay*. Examples.

136. Ir. *kere* 'river, riverbank' : Ta. *kārai* (1087)

137. Ir. *pete* 'drum' : Ta. *paṭai* (3319)

138. (= 791) Ir. *tele* 'head' : Ta. *talai* (2529)

139. Ir. *mele* 'mountain' : Ta. *malai* (3882)

140. Ir. *vere* 'hill, rock' : Ta. *varai* (4315)

141. Ir. *vele* 'net' : Ta. *valai* (4326)

\*a:

### 5.1. Reflexes

5.1.1. PDr. \*a: remains as a: in all the languages except Toda (5.2.) and Parji (5.3.)

#### Examples:

142. Ta. *a:, a:y* 'female of ox, sambur, and buffalo' : *a:-ppi* 'cowdung'; *a:y* 'the cowherd caste'; *a:yap* 'herdsman', fem. *a:yti*; *a:yam* 'a herd of cows'. Ma. *a:, a:n* 'cow', *a:yan* 'cowherd'; fem. *a:yi*, *a:cci*, Ko. *a:y* 'cow'. Ka. *a:* (pl. *a:kal*), *a:vu* 'cow'; *a:kal(a)* 'a cow'. Tu. *"ambi* 'cowdung'. Te. *a:vu* (pl. (Old) *a:-lu*, (Mod.) *-lu*) *ã:-bo;tu* 'bull'. Kur. *o:y* 'cow'. Malt. *o:yu* 'cow, ox', (283)

143. Ta. *a;r* (-*pp-*, -*tt-*) 'to shout, roar, bellow; slander, vilify'; *a:rppu* 'loud, tumultuous noise, laughter, joy'; *a:rava:ram* 'loud noise, shouting, roaring, bustle'; *a:ri* (-*pp-*, -*tt-*) 'to sound'; *arattu* (*aratti-*) 'to lament, cry, bewail, shout with excitement, sound; n. 'lamentation'; *arattal* 'twang of the string of a lute'. Ma. *a:r-* (-*tt-*) 'to cry aloud, roar, shout'; *a:rppi-* 'to make to shout', *atrava:ram* 'clamorous multitude'. Ko. *a:r-* (*a:t-*) 'to call'. To. *o:ṣf-* (*o:ṣt-*) 'to dance (of

Todas, really, to shout *hau hau* while dancing). Ka. *a:r* (*a:rt-*), *a:rcu*, *a:cu* ‘to cry aloud’, *a:rađi* ‘publicity, report, infamy, scandal’. Kod. *ara* (*arap-*, *arat-*) ‘to make loud hoarse noise, moo’. Tu. *a:rkii-* ‘to cry out, shout’; *arađii-* ‘to make a grating noise, interrupt, blab’; *ara-gini* ‘a talking parrot’. Te. *a:r(u)cu* ‘to cry aloud, shout, roar’; *a:rpu* ‘a cry’, Pa. *a:r-* ‘to sound (as bell, etc.)’. Ga. (Oll.) *arg-* ‘to bellow’. Konda *a:rpa-* (-*t-*) ‘to shout, howl’. Kui *a:r-* (*a:rt-*) ‘to call’. Kuwi. (S) *a:r-*. (312)

144. Ta. *a:ru* (*a:ri-*) ‘to cool, grow cold, be appeased, alleviated, mitigated, be suppressed, heal (as a wound)’; *a:rru* (*a:ri-*) ‘to cool (tr.), alleviate, console, dry (tr, as the hair)’. Ma. *a:ru-* ‘to be extinguished, grow cool, be calm, dry up, ‘heal’; *a:rru-* ‘to cool, allay, calm, dry (tr.)’. Ko. *a:r-* (*a:ry-*) ‘to become cool’, *a:t-* (*a:ty-*) ‘to expose to fire to remove ‘gollution’. To. *o:t-* (*o:ty-*) ‘(hot water) cools, become dry by peating’; *o:t-* (*o:ty-*) ‘to dry in heat (tr.)’; *a:L-(a:t-)* ‘(stream) goes dry, (pool, puddle) dries up’. Ka. *a:r*, *a:ru* ‘to be extinguished, grow cool, be calmed, dry’; *a:risu* ‘to cause to extinguish; *a:t-* (*art-*) ‘to be dried, dry up’. Kod *a:r-* (*a:ri-*) (stream, cloth) dries up’; *a:t-* (*a:ti-*) ‘to dry (tr.)’; *ara-* (*arap-*, *arat-*) ‘(water) dries up, become emaciated’. Tu. *a:ri-* ‘to grow or become cool or dry’; *a:jii-*, ‘to dry up, drain off (intr.)’; *a:ja:vu-* ‘to dry (tr.), drain’. Te. *a:ru* ‘to be extinguished, cool, be calmed or pacified, become dry’; *a:rcu*, *a:rpu* to cool (tr.), extinguish, dry (tr.), Kol. *a:r-* (*a:rt-*) ‘to become dry’; *a:rp-* (*a:rapt-*) ‘to make to dry’. Nk. *a:r-* ‘to become dry’. Nk(Ch.). *a:r-* ‘to be dried, be emaciated’, *a:r(u)p-* ‘to dry up, heal (tr.)’. Pa. *e:d-*, (NE) *e:d-* ‘to cool, cool off’. Ga. (S) *a:l-* ‘to cool down’. Go. *a:r-* ‘to grow coo, (of porridge)’. Konda (BB) *a:t-* ‘(water, etc.) to become cool Kui *a:j-* (*a:ji-*) ‘to become cool’; *a:s-* (*a:st-*) ‘to cool down’. Kuwi (F) *ayy-* ‘to become cool’. Kur. *arta?-* ‘to spread out in the sun for drying’. (346).

145. Ta. *ka:l* 'leg, foot'. Ma. *ka:l*. To. *ka:l* (*ko:lk ir-* '(child) sits on mother's leg to defecate'); *ko:s* 'excrement' Ko. *ka:l*. Ka. *ka:(u)*. Kod. *ka:li*. Tu. *ka:ri*. Te. *ka:lu*. Kol. *ka:l* Pa. *ke:l*. Ga. (Oll.) *ka:l*. Go. Konda. Pe. Mand. *ka:l*. Kui. *ka:du*. Kuwi *ka:lu*. (238)

146. Ta. *pa:tu* (*pa:ti-*) 'to sing'; *pa:tal* 'versifying, song'; *pa:ti* 'singer, tune'; *pa:tlu* 'song'. Ma. *pa:tu-* 'to sing'; *pa:ti* 'tune'; *pa:tlu* 'song, poem'. Ko. *pa:rv-* (*pa:rd-*) 'to make noise (crow)'; *pa:t* 'song'. To. *po:r-* (*po:ry-*) 'to sing'; (the song called *po:t*); *po:t* 'a particular type of song'; *po:t* (*po:ty-*) 'to shout'. Ka. *pa:du* 'to sing'; *pa:du*, *pa:ta*, *ha:du*. 'singing, song', Kod. *pa:d-* (*pa:di-*) 'to sing'; *pa:tii* 'song'. Te. *pa:du* 'to sing'; *pa:ta* 'song'. Kol. *pa:d-* (*pa:dt-*) 'to sing' *pa:ta* 'song'. Nk. *pa:r-* 'to sing'; *pa:ta* 'song'. Nk (Ch.) *pa:r-* (*pa:t-*) 'to sing'; *pa:ta* 'song'. Pa. *pa:d-* 'to sing'; *pa:ta* 'song'; Ga. (Oll.) *pa:r-* 'to sing'; *pa:te* 'song'; (S) *pa:r-* 'to sing'; *pa:te* 'word'. Go. (Tr.) *wa:r-*, (A) *va:r-* 'to sing'; *pa:ta*: 'song'. Konda *pa:r-* 'to sing'; *pa:ta* 'song'. Kuwi (F) *pa:c-* 'to sing'. Kur. Malt. *pa:r-* 'to sing, bewail'. (3348)

## 5.2. PDr \*a: > To. a: / o:

5.2.1. The rule for the two divergent Toda developments is as follows.

PDr \*a: > To. a: / -\*ay  
 > To. o: elsewhere

Examples:

(i) PDr \*a: > To. a:/-\*ay (only nine instances)

147. (=967) To, *ka:k* 'crow'. Ta. *ka:kka:y*, *ka:kkai* (1197)

148. To. *ka:ṛ* 'silver bangle worn on right leg by chief men': Ta. *ka:ṛai* 'gold or silver collar'. (1264)

149. To. *pa:r* 'crowbar': Ta. *pa:rai* (3367)

150. To. *pa:s* 'a timber tree': Ta, *pa:lai* 'silvery leaved ape-flower, *Mimusops kauki*'. (3373)

151. (= 1103) To. *a:n* 'elephant' : Ta. *ya:nai*. (4235)

152. (= 11) To. *pa:w* 'plantain, *Musa paradisiaca*' : Ta. *va:lai* (4403)

153. To. *a:s* 'Toda house' : Ta. *a:lai* 'apartment, hall'  
(< Skt. *śa:la:-*). (*DBIA* 165)

154. To. *ta:m asky* 'husked millet' : Ta. *ca:mai* 'common millet'. (*DBIA* 163)

155. To. *pa:f* 'cockroach' : Ma. *pa:rra*. (3393)

(ii). PDr. \**a:* > To. *o:* in other environments.

156. To. *a:d-* (*o:dy-*) 'to dance' : Ta. *a:tu* (290)

157. To. *so:fer* '1000' < Ka. *sa:vira*, *sa:sira* < Skt. *sahasra-* (309)

158. To. *o:L* 'man' : Ta. *a:l*. (342a)

159. To. *ko:y* 'cultivated field' : Ta. *ka:tu* 'forest'. (1206)

160. To. *ko:f* 'wind' : Ta. *ka:rru* (1206)

161. To. *ko:rm* 'curry' Ta. *ka:ram* 'pungency'. (1227)

162. (= 145) To. *ko:l* 'leg' : Ta. *ka:l*. (1238)

163. To. *no:r* 'string made from bark' : Ta. *na:r* 'string' (3023)

164. To. *po:s* 'milk' : Ta. *pa:l*. (3370)

165. To. *po:r-* 'to fly' : Ta. *pa:ru* 'to run' (3311)

166. To. *po:n* 'sky' : Ta. *va:n(am)* (4410)

167. To. *te:rm* 'one string of bead necklace' : Ka. *daira* 'thrcad'. (2586)

168. To. *so:py* 'sleeping mat' (< Badaga): Ta. *ca:ppai*, Ka. *ca:pa*, *ca:pe*, *sa:pe*. (2024)

169. To. *so:lm* 'assets and liabilities' < Ka. *sa:la* (2039)

170. To. *nō:y* 'twisted string' ; *nō:l-* (*nō:d-*) 'to make rope of bark' : Ta. *ñā:n* 'string'. Ka. *ne:n(u)*. (2369).

171. (=1095) To. *nō:t* 'sun' (only in myths) : Ta. *ñā:yiru* (2371)

172. To. *so:k* 'enough' < Ka. *sa:ku*. (2037b)

173. To. *oðyo:łm* 'sign' < Ta. *aṭaiya:łam*, Ma. *aṭaya:łam* (79)

174. To. *ko:foty* 'ditch' (in song) : Ta. *ka:lva:y* 'irrigation channel'. (1239)

175. To. *pasof* 'jack-fruit' : Ta. *pala:, pilas, palavu* 'jack-tree, *Artocarpus integrifolia*'. (3290)

Examples 161, 167 and 169 (which latter must be a loan form Ka. because of the initial *s*-) make it evident that PDr. \*a: changes to To. o: even before \*-am.

5.2.2. Toda words that contain a: when not followed by \*-ay can be explained as loanwords; in a few cases the long a: results from contraction (see examples 177 and 183).

176. To. *ka:y* 'a bear', *ka:y(e) mad* 'the black-headed one' are given in 1253 Ta. Ka. *ka:l* 'blackness'; it is now certain that this grouping is wrong although it was preferable to Emeneau (1958: 54-55) : 'It would be tempting to connect the Toda word with PSDr. \**karaṭi* 'bear' on the basis of the phonetic development \**ara* > To. a: ..., but the final -i of the PSDr. form is missing in the Toda form, and on the whole it seems better to regard the word as a development from the 'black' word, or at most to suppose that \**ka:y* (< \**karaṭi*) has been re-shaped under the influence of the other word'. To. *ka:y* goes better with 1059a Ta. Ma. *karaṭi* 'bear' and *ka:y(e)* with 1073 Ta. *kari* 'to be charred, n. charcoal' (both the entries are inter-related). The Toda forms show contractions (see Emeneau 1958: 57; 60-63).

177. To. *a:L-* (*a:t-*) '(stream) goes dry, (pool, puddle) dries up' (346) is not directly relatable to Ta. Ma. *a:łu*; it

is perhaps a contraction of \**aral*; cf. Ka. *ar* (*at-*) 'to be dried, and Kod. *ara-* (*arap-*, *arat-*) ('water) dries up'. The Kodagu past stem *ara-t-* rather than *ara-nd-* probably indicates that Kod *ara-* is from \**aral-*.

178. To. *ka:g* 'black thread' (1198) to obviously a loan from Ka. *ka:gu* 'a dark-black cloth' (cf. also Ma. *ka:nki* 'blue or dark cloth').

179. To. *-ga:rf* (in Ka. *-ga:rf*) and *ka:r* both meaning 'darkness' (1175) must be considered as loans from Ma. *ka:ru* 'darkness'.

180. To. *pa:g-* (*pa:gy-*) 'to fall, (disease) subsides' (4371) must be a loan from Ka. *ba:gu* 'to bend' or Ta. *va:nku* 'to bend, subside'.

181. To. *pa:L* 'each seed section of a jackfruit' seems to be from \**pa:lay* (3639); cf. Ka. *be:le* 'split pulse'.

182. To. *pa:L* 'spark' (: Ta. *va:l* 'lustre', 4406) seems to be from \**va:lay*.

183. To. *pa:n* 'moss' (S 646) may be from \**pacanay*); cf. Ta. *pacan̤tai* 'verdure, moisture' (the whole entry S 646 may be merged with 3161 Ta. *paca* 'to be green').

184. To. *pa:n* 'festival (any except funeral)' is put in 3351 Ta. *pa:n* 'song' with a query; semantically 3221 Ta. *pan̤tikai* 'festival' would be a better etymology but in either case there are phonological problems.

185. To. *ta:f* 'fern' may be from \**ta:vay*: cf. Ma. *ta:vi* 'bracken'. (2595)

186. To. *pa:ym* 'story of actual event' seems to be a loan from Kota; cf. Ko. *pa:ykm* 'a story' (< \**palikkam*, 3298). The change \**l* > *y* occurs only in Kota but not in Toda.

187. To. *ma:f* 'Badaga man' seems to be from \**ma:vay* (3956)

188. To. *ka:sṭk* 'pleiades' (:Ta. *ka:rṛtikai*, DBIA 96) which obviously is a loan from one of the neighbouring major languages retains the \*a: most probably because of the following original \*-ay,

5.2.3. The allomorphy of the Toda verbs 'come' and 'give to 1st or 2nd persons' is a good illustration of our rules. The allomorphs of the two verbs respectively are: *po:r-* (< \*va:r-) / *po:-* (< \*va:-) / *po-d-* (< \*va-nt-) / *pa-* (< \*var-) / *paś* (< \*var-) (4311) and *to:r-* (< \*ta:r-) / *to:-* (< \*ta:-) / *to-d-* (< \*ta-nt-) / *ta-* (< \*tar-) / *taś-* (< \*tar-) (2526); see Emeneau (1945: 191) for the distribution. In these, the long \*a: has changed to o: because there was no following \*-ay and the short \*a remained as a before \*r but it changed to o elsewhere.

5.2.4. It is to be noted that before \*-ay both the short and the long vowels are retained without change. It is interesting to note further that \*-ay is responsible for the change of the preceding \*o and \*o: to To. *wa* and *wa:* respectively (Emeneau 1970: 38-41; see also 12.2 and 13.2, below). From this it is clear that in the structure of Toda, o and o: were not tolerated before \*-ay. These developments indicate that PDr. \*-ay did not change to e in pre-Toda unlike in (later) Tamil, Kannada, pre-Kota and Koḍagu.

5.2.5. Examples 160 to 165 show that an alveolar consonant does not inhibit the change PDr. \*a: > To. o: although it does inhibit the change PDr. \*a>To. o. Examples 66, 67, 72, 73 and 74 show that the alveolar nasal \*ṇ does not inhibit the change of PDr. \*a > To. o. An alveolar non-nasal consonant, which is [-Back] prevented the preceding central \*a from changing into To. o, which is [+Back].

5.2.6. The changes PDr \*a > To. o, and \*a: > To. o: appear in some words which on other criteria are clearly identifiable as loan-words (see examples 65, 157, 168, 169, 172 and 173).

On the other hand, there are also some words in which the change has not taken place although the conditions are favourable and these we have explained as loanwords (see examples 87 to 99; 178 to 180 and 186). Words of the former group must have been borrowed by Toda before the operation of the changes under discussion while those of the latter group must have been borrowed after it.

5.2.7. The above study enables us to give the relative chronology of some of the changes involved. First of all, it is clear that the change of \**a* and \**a:* to To. *o* and *o:* respectively is anterior to the loss of \*-ay or \*-a of the second syllable. It is anterior also to the loss of \**r* and \**ɻ* in instances like 35; for loss of \**r*, cf. To. *makol* 'tomorrow' (< \**maru-pakal*; 3903). Since the *a:*, which is the result of contraction as in examples 56, 58, 177 and 183 did not change to *o:*, we can conclude that these contractions took place after the completion of the change of \**a:* > To. *o:*. The examples 67 and 74 indicate that the nasal in the cluster \**ŋɻ* was present at the time of the change of \**a* to To. *o* and that it was lost only at a later time.

5.3. PDr. \**a:* > Pa. *a:* / *e:*,

5.3.1. See 4.3 for the conditioning.

Examples:

(i) PDr. \**a:* > Pa. *e:* / - Alveolar (of pre-Parji).

189. (= 144). Pa. *e:d-*, (NE) *e:d-* 'to cool, cool off' : Ta. *a:ru* 'to cool'. (346).

190. Pa. *e:dir*, (S) *e:yir* 'hail' : Ga (P) *a:dir*, (S) *a:dur* 'hail'. Go. *a:dur*, Konda. *a:nɻaga*, Pe. *a:njga*. Mand *a:njgi*, Kui. *a:ji*, Kuwi (C) *ajji*; (Su.) *a:ji*. (348)

191. Pa. *e:l mari* 'pipal tree' : Go. *a:li*. Ga. *a:l*. (324)

192. (= 145). Pa. *ke:l* 'leg' < PDr. \**ka:l* (1238)  
 193. Pa. *pe:l* 'milk, breast' < PDr. \**pa:l* (3370)  
 194. Pa. *ve:l-* 'to fly, jump' : Ga. (Oll.) *vatl-*. (4398)  
 195. Pa. *me:l* 'liquor' : Ga. *ma:l* (3950)

(ii) PDr. \**a:* > Pa. *a:* / - Non-Alveolar consonant (of pre-Parji).

196. (= 146). Pa. *pa:d-* 'to sing' < PDr. \**pa:t-*. (3348)  
 197. Pa. *ma:l* 'daughter' (< \**ma:l*) : Ga. (Oll.) *ma:l* 'woman' < PDr. \**makał*. (3768)  
 198. Pa. *katl-* 'to smart' : Ma. *katlu-*. (1259)  
 199. Pa. *pa:p* 'child, baby, young of animals' : Ga. (Oll.) *pa:p.* (3369)

5.3.2. Among the exceptions to the above rules, there are demonstrative, personal and reflexive pronouns, one numeral and one interjectional word. Krishnamurti considers this to be a case of grammatical constraint on the spread of a sound change. The following are the words.

200. Pa, *ana, ani* 'there' : Kol. *anay* 'in that way'. (1)  
 201. (= 1104) Pa. *a:n* (*an-*) 'I' < \*PDr. \**ya:n* (\**yay-*). (4234)  
 202. Pa. *ta:n* (*tan-*) 'oneself' < PDr. \**ta:y* (\**tay-*). (2612)  
 203. Pa. *ale* exclamatory vocative : Ka. *ale* interjection used in calling to woman. Konda Pe. Kui. *ale* (S 35)  
 204. Pa. *na:luk* 'four' (adj. *nel-* < \**nal-*) : PDr. \**na:l-*. (3024)

5.3.3. Krishnamurti (1978b) further observes that the vowel-raising rule (*a* > *e*) operates synchronically in Parji in inflection. Thus, the final *a* of a nominal stem changes to *e* before the plural suffix *-l* and the accusative-genitive suffix *-n* (both are alveolars). Examples:

	Stem	Plural	Accus.-Gen.
‘dog’	<i>netta</i>	<i>nette-l</i>	<i>nette-n</i>
‘cloth’	<i>ganda</i>	<i>gande-l</i>	<i>gande-n</i>
‘lemon’	<i>rimma</i>	<i>rimme-l</i>	<i>rimme-n</i>
‘field’	<i>va;ya</i>	<i>va;ye-l</i>	<i>va;ye-n</i>

Since some Parji nouns ending in *a* have cognates in Gadba, Kolami and Naiki with finale *e*, he concludes that this change goes back to the Proto-Kolami-Parji period and that the stem ending in *e* has completely replaced the stem ending in *a* in the latter group of languages. Examples:

	Pa.	Ga.(Oll.)	Ga.(S.)	Kol.	Nk.
‘bullock, cow’	<i>ko:nda</i>	<i>ko:nde</i>	<i>ko:nde</i>	<i>ko:nda</i>	<i>ko:nda</i>
‘vegetable’	<i>kucca</i>	<i>kuse</i>	<i>kucce</i>	<i>kucce</i>	<i>kucce</i>
‘goat’	<i>me:ya</i>	<i>me:ge</i>	<i>me:ge</i>	<i>me:ke</i>	<i>me:ke</i>
‘fly’	<i>pinda</i>	<i>pinde</i>	—	—	<i>pinda,pinde</i>

“The vowel-raising rule (*a > e*) seems to have started in Proto-Central-Dravidian (i.e. Proto - Kolami-Parji (PSS)) sporadically in nominal inflection particularly before the plural morph *-l* (<\*-l). From this it follows that deretroflexion of the plural morph preceded this rule in point of time. *a > e* is also noticed irregularly before *n* and *r* representing personal suffixes in the languages closely related to Parji. Only in Parji does the vowel-raising rule remain as a synchronic morphophonemic process; in Oll, Ga., Kol. and Nk, we find, through reanalysis of *a-* ending stem as *e-* ending that the rule had been lost before it covered the entire lexicon in plural formation.

The vowel-raising rule then extended morpheme-internally in Parji in a more generalized form by allowing the process to take place before all alveolar consonants, including the obstruents”. (Krishnamurti 1978b : 273-274).

Krishnamurti (*ibid.*, 274) further notes : "The vowel-raising rule has also historically covered the pronominal inflections in all conjugations except the future tense, where we have *a* before *n*, *r* and \**d*. A trace of *a/e* alternation is synchronically left in the conjugation system — recoverable by (1) a comparison of the future tense forms with the rest of the verb system; and (2) by the quality of the auxiliary (epenthetic) vowel, which has not undergone vowel harmony in the Southern dialect".

5.3.4. In the Northwestern dialect the personal suffixes are illustrated by the following paradigm of the predicative noun formed from the adjective *pun-* 'new' (see also P.S. Subrahmanyam 1971, Chapter 5).

Sg.	Pl.
1. <i>pun-en</i> 'I am new'	<i>pun-om</i> 'we are new', etc.
2. <i>pun-ot</i>	<i>pun-or</i>
3. m. <i>pun-ed</i>	<i>pun-er</i>
n. <i>pun-o(t)</i>	<i>pun-ov</i>

The underlying vowel in all the suffixes is *a* and it changed to *e* before an alveolar, i.e. *-en* < \**ay*, *-ed* < \*-e*ə* < -\**aə*, *-er* < \*-ar. In the other cases, *a* changed to *o* "in unstressed position, perhaps under the influence of Oriya in which short /a/ is always phonetically a low back rounded vowel." (*ibid.*, 263). However, in 2nd pl. *-or*, *o* rather than *e* occurs either because of the analogy with the 2nd sg. suffix or because of the need to distinguish between it and the 3rd masc. pl. suffix.

### 6.1. Reflexes

6.1.1. PDr. \**i* remains as *i* in all languages except Toda; in Toda it has the two reflexes *i* and *î* (see 6.2).

For *i* / *e* and *u* / *o* alternation in South Dravidian, see Chapter 15. For special changes of PDr. \**i* in Ko $\ddot{d}$ agu and Tu $\ddot{z}$ u, see Chapter 17.

#### Examples:

205. Ta. *it̪u* (*iṭuy-*, *iṭt-*) ‘to place, deposit, keep’. Ma. *it̪u*- (*iṭt-*). Ko. *id-* (*iṭ-*). To. *iđ-* (*iṭ-*) Ka. *idu* (*iṭt-*). Ko $\ddot{d}$ . *id-* (*iđuv-*, *iṭt-*) ‘to drop (tr.)’. Tu. *id-* ‘to place, put down’. Te. *idu*. Kol. *id-* (*iṭt-*), Nk. *iṛ-* (*iṭt-*). Nk. (Ch.) *iṛ-* (*iṭt-*). Pa. *id-* (*iṭt-*). Ga. (Oll.) *ir-*; (S) *ir-* (*iṭt-*). Go. *irr-*, (A) *ir-* (*irt-*). Kon $\ddot{d}$ a *id-*, *iṛ-* (*iRt-*), *iṭki-* (-*t-*) ‘to put on (ornament)’. Pe. *it̪-* (-*t-*); *iz-* (*ist-*). Mand, *iṭ-*. Kui *it̪-* (*iṭit-*). (375).

206. Ta. *iraṇ̪tu* ‘two’; *iru* (before consonant), *i:r* (before vowel) adj.; *iraṇ̪tai* ‘pair, couple’, Ma. *raṇ̪tu*; *iru* /-C, *i:r* /-V adj.; *iraṇ̪ta* ‘double’. Ko. *eyđ*; *ir* /-C, *i:r* /-V adj. To. *e:đ*; *i* /-C, *i:r* /-V adj. Ka. *erađu*; *iru* /-C, *i:r* /-V adj.

Kod. *dandī* 'two things'; *iru* /-C, *i:r* /-V adj. Tu. *raddī*; *ir-*, *irī* adj. Te. *reñdu*; *iru* /-C, *i:r* /-V adj. Kol. *indiñ*. Nk. *indīng*. Nk. (Ch.) *erndi*; adj. *ir.* Pa. *irđu*; *ir* adj. Ga. (Oll.) *indi*, adj. *ir*; (P. S<sup>2</sup>) *iddig*. Go. *rand*. Konda *rundi*. Pe. *rindan*; *ri* adj. Mand. *ri*. Kui *ri:nđe*; *ri* adj. (K) *rindi*; *ri* adj. Kuwi *rindi*; *i:r* (F) / *ri* (S) adj. Kur. ē:y, e:ñd, Malt; *iwr* 'two persons'; *-is* 'two (things)' Br. *irač* 'two (entities)'. *ira:* adj. (401)

207. Ta. *il* 'house, place, wife'; *illam* 'house'. Ma. *il* 'house, place'; *illam* 'house of Nambudiri'. Kod. *illavēn* 'man who is a relative'. Tu. *illi* 'house, dwelling, family'. Te *illu* (obl. *in̄ti-*) house'. Kol. Nk. *ella*. Pa. *il podi* 'roof'. Konda *ilu* (pl. *ilku*). Pe. *il* (obl. *inj-*, pl. *ilku*). Mand. *il*. Kui *iđu*. Kuwi (F.S.) *illu*; (Su. P) *il*. (420).

208. Te. *giccu* 'to scratch, pinch'. Kol. (SR) *kism-* 'to pinch'. Nk (Ch.) *kis-* / *kicc-*. Pa. *kicc-* 'to pluck strings of instrument with fingers'. Ga. (Oll.) *kisk-* 'to pinch'; (S) *kicc-* 'to pluck'. Konda *kis-* 'to pinch'. Pe. Mand. *kic-*. Kui. *kis-* (*kisi-*) 'to pinch' nip'; pl. action *kisk-* (*kiski-*). Kuwi *kic-* 'to pinch, nip', Kur. *kicc-* 'to break into very small pieces with the fingers'. Br. *kishk-* 'to pluck, break off'. (1271)

209. Ta. *cikku* (*cikki-*) 'to become entangled, caught, obtained'. Ma. *cikku-* 'to be entangled'. To. *tik-* (*tiky-*) 'to be trapped'. Ko. *cik-* (*ciky-*) 'to be caught, obtained'. Ka. *sikku*, *sigu* (*sikk-*), *sirku*, *silku* 'to become entangled caught, be got'. Kod. *cikk-* (*cikki-*) to become entangled' Tu. *sikkī*, *tikki-*, 'to be ensnared, obtained'; *silki-* 'to be entangled, perplexed'. Te. *cikku* 'to be entangled, obtained'. Kol. *sik-* (-t-) 'to hang (intr.)' Pa. *cirñg-* 'to get stuck, trapped'. Go. *jirk-* 'to be caught on thorns', *hilk-* 'to be entangled'. Kuwi (F). *sikku*: *ayy-* 'to be tangled'; (S) *cikku* *ki:-* 'to snare'. (2060).

210. Ta. Ma. *vil* 'bow'. To. *pīś*. Ko. *vily*. Ka. *bil*, *billui*. Kod *billi*. Tu. *billi*, *biri*. Te. *vil(l)u*, Kol. Pa. *vil*. Ga. *vind(u)*. Go. Konḍa Pe. Mand. *vil*. Kui. *vidu*, *vilu*. Kuwi (Su. P.) *yellu*. Br. *bill*. (4449)

### 6.2. PDr. \**i* > To. *i*, *i*.

6.2.1. PDr. \**i* has *i* as its predominant development in Toda.<sup>1</sup> Although most of the Toda instances in which *i* occurs can be considered as loans, there is one notable phonotactic feature, viz. before a palatal consonant (*c*, <sup>v</sup>*c*) and the sibilant *s*, *i* alone occurs but not *ii*. Therefore, we can say that, in Toda, PDr. \**i* remains as *i* before the immediately following *c*, <sup>v</sup>*c* or *s* but it changes to *ii* elsewhere.<sup>2</sup> The rule is phonetically well motivated because the association between a front vowel and affricates and sibilants is quite common. The other Toda words with *i* are all borrowings and this can be established in most of the cases even on other grounds (like the presence of initial *s-*, see 23.1.2). Needless to say, these words must have entered the language after the change \**i* > *ii* has ceased to operate. It is to be noted that after a word-initial *s*, *i* alone occurs but not *ii*; all such words are loans (cf. examples 222-225). In general, it can be said that *ii* never occurs in loanwords.

6.2.2. However, there are some words with *i*, which cannot be considered as loans and we must look for other ways of explaining these; examples 226 and 227 come under this

1. Emeneau (1970 : 44) noted the two Toda developments of PDr. \**i* without attempting to explain the divergence.

2. If there is an intervening consonant in between \**i* and *c*, <sup>v</sup>*c* or *s*, the result will be *ii*, not *i*, for example, *tiry-* (*tirc-*) 'to twist (tr.)', *tirc-* (<sup>v</sup>*tire-*) 'to translate' < \**tiri* (DED 2655); also see DED 372, 3435.

category. *iṣṭa:s*, which contains special Toda sounds and *il-*, a basic vocabulary item cannot be loans although, in the latter, the presence of *l* instead of the expected *s* is intriguing. It is, however, possible to say that the word-initial \**c-*, that was originally present in these might have been responsible for the retention of *i*. The former word may be contrasted with *iṣt-* (*iṣty-*) 'to seat, keep in a place' (< \**irutt-*), *isk* 'lifetime' (< \**irukkay*) in DED 407 which contain no initial PDr. \**c-* and show *i*. These words also rule out the possibility of considering *s* (along with *s*) as the conditioning factor for the retention of PDr. \**i* in example 226 (also cf. DED 2659).

6.2.3. Is the PDr. initial \**c-* (which became To. *t-*) responsible for the retention of \**i* in the words in examples 216, 220 and 221? If that is the case, we have to conclude that in Toda, PDr. \**c-* was retained without change up to the time of the operation of \**i* > *i*.<sup>3</sup>

6.2.4. The Toda words in examples 234–337 also do not look like borrowings because of the presence of the characteristic sound *L* in them. If at all they are loans, they should have entered into the language before the change of \**l* > *L* but after the change of \**i* > *i*. There is no other evidence to show that the change \**l* > *L* operated after \**i* > *i*. Moreover, except for the word in example 236, there are no exactly corresponding words for the remaining words in the other languages.

3. The initial *t* in To. *tīt* in example 211 may not be from PDr. \**c* although some languages show evidence for it, for example, Kur. *cicc*, Malt. *cicu* 'fire'. The Toda word is closer to Ko. *tic* and Kod *titti*. The initial *t* in these instead of the otherwise common *k-* in SDr. may be due to contamination with \**ti*: 'fire' (DED 2672).

6.2.5. On the other hand, it cannot be said that the following *L* conditions the retention of \**i* in these cases. It is impossible not only on phonetic grounds but also because of the existence of at least one word, namely, *pilL* 'way through thicket' (Ko. *pil* 'way, road, entrance to path through thicket, 3446) in which \**i* > *i* before *L*. The conditioning factor cannot be even *Ly* because *y* is missing in example 237. For the present the problem must be left unsolved.

6.2.6. The absence of the change \**i* > *i* in To. *kirc-* (*kic<sup>v</sup>c-*) 'to shout' in example 603 and the words in example 233 may be because they are onomatopoetic,

6.2.7. The Toda words derived from the proximate demonstrative base \**i-* (DED 351) show both *i* and *i*; *i* occurs when nothing follows as in the adjective *i* or before *θ* or *t* (*iθ* (obi. *in-*) 'this person or thing', *it* 'in this direction', *il* 'here' is a loan from Ka. *illi*); *i* occurs before other consonants, e.g. *it* 'this many'. Before *n* and *s* both occur, e.g. *iθ* (obl. *in-*) but *in* 'other', *isn* 'from this direction' but *isym* 'exactly'. No further generalisation of the conditioning factors is possible.

(i) PDr. \**i* > To. *i* /  $\left\{ \begin{matrix} {}^{*c-} \\ -\{c, {}^v c, s\} \end{matrix} \right\}$

The *i* in loan words remains unchanged.

211. To. *kic*. *kic<sup>v</sup>* 'fire' (in songs; < Badaga), *tit* : Ta. *kiccu*. Ko. *tic*. Ka. *kiccu*, *kircu*. Ko<sup>d</sup>. *titti*. (1272)

212. To. *micm* 'remainder'; ? *misx-* (*misxy-*) 'to pollute diary by transgressing rules' ; *mik-* (*miky-*) 'to be left over, remain'; *mixc-* (*mixc-*) 'to save, put by' ; Ta. Ma. *miku* 'to be in excess'; *miccam* 'remainder'. Ka<sup>d</sup>. *mikku* 'to remain over'. (3962)

213. To. *mic-* (*mic-*) to flash, lighten': *mic* ·lightning (in songs): Ko, *minc-* (*minc-*). Ka. *miñcu*. (3994).

214. To. *misx-* (*misxy-*) 'to move' (intr.) slightly upward from position, budge'; *misk-* (*misky-*) 'to lift slightly from ground' : Ka. *misuku* 'to move, stir'. (3964).

215. To. *kiskwü̯t-* (*kiskwü̯ty-*) 'to tickle (tr.)': *kiskwü̯l-* (*kiskwid-*) 'tickling is (with dative)'; Ta, *kiccukiccu* *mu:t̪tu/ppan̪nu* 'to tickle (tr.)'. (1274)

216. (= 209). To. *tik-* (*tiky-*) 'to be trapped (physically or figuratively)'; *sik* 'knot or tangle in hair' (< Bañaga): Ta. Ma. *cikku* (*cikki-*) 'to become entangled, n. tangle'. (2060)

217. To. *idy-* (*idt-*) 'to seize, cling to' (< Bañaga): Ta. *pi̯ti* (-*pp-*, -*tt-*). (3412).

218. To. *sinm* 'anger, grudge' (< Bañaga): Ta. *cηam*. (1332)

219. To. *kin* 'small': Kod *kiññe* 'boy'. Tu. *kinni*, *kiññi* 'small, young'. (1335)

220. To. *sin* 'gold; ear-ring' (< Badaga); *tingony* 'bag in which old coins are put for use at funerals' : Ta. *cηynam* 'coin, gold coin'. Ka. *cinna* 'gold'. (2136).

221. To. *tiggn* 'unexpectedly'; *tig aγy-* (*aγs-*) 'to come to know suddenly' : Ta. *cikk-enə* 'quickly, promptly'. (2061; the reason for the different vowels in the two Toda words is not clear).

222. To. *sig* 'shame' (in songs < Badaga) : Ka. Te. *siggu*. (2062)

223. To. *sixb* 'sharp end of piece of wood' (< Badaga): Ka. *sigi* 'to split (as wood)'. (2056).

224. To. *siry* 'joy' < Ta. Ma. *ciri* 'laughter'. (1304)

225. To. *silɔ:r silfo:rm* 'silver, small change'; *sily* 'silver' (in songs) (both < Badaga) : Ta. *cillat̪ai*. (2122).

226. To. *iṣθa:s* 'night-time' : Ta. *iravu*; *ira*, *ira:*, *ra:* 'night' (2102; in PDr. there was \**c-* at the beginning of the root of this entry; cf. Pa. *ciruṇ* 'charcoal').

227. (= 1013) To. *il-* 'not to exist' : PDr. \**cil-*. (2106)

228. To. *sitik*, *titik* 'a little' : Ta. *cigu*. Ka. *kigu* 'small'. (1326)

229. To. *pily* 'sorcery practised by Todas' < Ta. *pilli* 'sorcery, magic'. (3439)

230. To. *ikot* 'difficulty, narrowness of path' (< Baḍaga): Ka. *ikkaṭṭu* 'narrowness'. (447)

231. To. *kiḷy* 'parrot < Ta. (Ma. Ka.) *kili*. (1318)

232. To. *kit-* (*kiṭy-*) 'to be caught (in crowd, by buffalo's horns, by promise that one must keep, etc.)' < Ta. *kitṭu* 'to draw near (in time or place)'. (1287)

233. *kis-* (*kisθ-*) 'to crow'; *kilk-* (*kilk'y-*) 'to neigh' (< Baḍaga) : Ta. *cilai* (-*pp-*, -*tt-*) 'to sound'. Ka. *kele* 'to cry or shout with energy or for joy'. (311)

234. To. *kiḷy-* (*kiḷc-*) 'to ladle out (food)': Ta. *kiḷai* (-*pp-*-*tt-*) 'to dig up'. (1321)

235. To. *kiḷy-* (*kiḷc-*) 'to pinch with fingernails': Ta. *kiḷlu* (*kiḷli-*) 'to pinch with the thumb and fingers'. (1322)

236. To. *piḷy-* (*piḷc-*) 'to utter long, high shout of joy or triumph; n. expression of joy' : Ta. *viḷ* (*viḷv-*, *viṇṭ-*) 'to say, tell'; *viḷi* 'to roar, shout'. (4460).

237. (= 1169) To. *piḷθ* in *mo:t fiḷθ* 'son's wife (not being one's sister's daughter' : Ta. *piḷai* 'child'. (3449)

(ii) PDr. \**i* > To. *i* elsewhere.

238. To. *ir-* (*iθ-*) 'to sit, live' : Ta. *iru* (-*pp-*, -*nt-*). (407)

239. To. *ib* 'needle' : Ta. *irumpu* 'iron'. (411)

240. To. *kiṇṇm* (obl. *kiṇṭ-*) 'metal eating vessel' : Ta. Ma. *kiṇṇam* 'small metal cup'. (1291)

241. To. *tif* :mountain': Ta. *tiftu*, *tifai* 'rising ground'. (2633)

242. To. *nil-* (*nid-*) 'to stand' < PDr. \**nil-*. (3043; To. *nilc-* (*nilc-*<sup>v</sup>) 'to stop (tr.)' is possibly a loan from Ka.)

243. To *id-* (*it-*) 'to put' < PDr. \**it-* (375; To. *idc-* (*idc-*<sup>v</sup>) 'to set fire to, smoke (tobacco)' is possibly a loan from Ka.; it may be shifted to 3412).

244. To. *tiry-* (*tirc-*) 'to twist (tr.)'; *tirc-* (*tirc-*<sup>v</sup>) to translate'; *tiry* 'again'; *tirx-* (*tirxy-*) 'to turn (intr.)'; tr. *tirk-* (*tirky-*); *tirky* 'turn in road; a time, turn'; *tirb-* (*tirby-*) to twist (tr. cane, bamboo)'; *tirp-* (*tirpy-*) 'to turn (key)': Ta. *tiri* (-v-, -nt-) 'to turn etc.' (2655).

244a. To. *tigil* 'moon': Ta. *tinkał* 'moon. month'. (2626).

245. To. *tin-* (*tid-*) 'to eat (including a meal)' < PDr. \**tin-* (2670a)

246. To. *pīr-* (*pīt-*) 'to release, let go, divorce; leave, forsake (in songs); bring down (water from higher up)'; *pīrc-* (*pīrc-*<sup>v</sup>) 'to drive away'; *pīdz,-* (*pīdž-*) 'to get released, work to get someone released': Ta. *vītu* (*vītuv-*, *vīt-*) 'to leave'. (4419).

6.3. \*-(C<sub>1</sub>)C<sub>2</sub>i > Ko. yC (where C<sub>1</sub> = C<sub>2</sub>).

6.3.1. In Kota-Toda \*i of the non-initial syllable changes to y (2.3.9; note the change y + dental > palatal with loss of y, which took place in Proto Tamil-Toda and hence is earlier). In Kota, this y often undergoes metathesis with the preceding consonant but there are also a number of cases without such change (this was noted by Emeneau (1967: 377) in his discussion on the formation of the secondary stem with the suffix y). A close examination of the data yields some general statements that account for this change as well as for its absence.

6.3.2. First of all, it is fairly obvious that a morphemic *y* has a strong tendency to remain without change while the non-morphemic *y* has a tendency to undergo metathesis. There are two cases of the morphemic *y*: (i) the secondary stem formative (past suffix in origin) and (ii) the feminine suffix. In both the cases, the instances with *y* remaining unchanged are far greater in number than those in which it undergoes metathesis.

Emeneau (1967: 400–404) has given a list of Kota verbs that take the *y* suffix. The following points emerge from a scrutiny of the list.

(i) Metathesis takes place very commonly in verbs containing *u:C*, e.g. (*C ≠ r*)

- ku:p-* (*kutyp-*) 'to blow with breath'
- u:t-* (*u:yt-*) 'to fix into ground by pressure' (650)
- mu:g-* (*mu:yg-*) 'to submerge oneself' (4096)
- tu:k-* (*tu:yk-*) 'to carry on shoulder' (2777)

There are fourteen such verbs all of them ending in *p*, *t*, *d*, *t̪*, *k* or *g*.

- u:nd-* (*u:ndy-*) 'to transplant' (650)
- tu:nd-* (*tu:ndy-*) 'to force an action' (2782)
- pu:r-* (*pu:ry-*) 'to yoke' (3577)
- u:r-* (*u:ry-*) 'to throw' (4492)

The above four verbs with *u:* do not show metathesis. The first two contain a consonant cluster and therefore they are not exceptions to the above statement. *pu:r-* is probably a loan from Badaga; Kota contains also *pu:t̪-* (*pu:yt̪-*) 'to fit into sheath (tr.)', which shows metathesis as expected. *u:r-* does not show metathesis like any other verb ending in *r*; there are twenty such verbs none of them showing metathesis (see (iv) below).

(ii) Verbs containing a long vowel other than *i*: and ending in *k* or *g* (but not *ng*) regularly show metathesis:

- a:k-* (*a:yk-*) 'to make to become' (282)
- ve:k-* (*ve:yk-*) 'to winnow' (4479)
- po:k-* (*po:yk-*) 'to spend (a period of time)' (3734)
- va:g-* (*va:yg-*) 'to bulge (tr., pot)' (4371)
- to:g-* (*to:yg-*) '(intuition) comes (to person)' (2942)

Contrast:

- pi:k-* (*pi:ky-*) 'to part (tr., hair, bushes)' (3459)
- i:g-* (*i:gy-*) '(belly or person) feels hungry'
- ta:ng-* (*ta:ngy-*) 'to support' (2573)

(iii) There are a few individual cases of metathesis that cannot be brought under any generalisation:

- vent-* (*veynt-*) 'to ask' (4472)
  - (contrast *nant-* (*nanty-*) 'to wet thoroughly' (3006))
- po:t-* (*po:yt-*) 'to roll backwards and forwards (tr.)'. (3516)
  - (contrast *pi:t-* (*pi:ty-*) 'to separate (joints of carcass)' (3446))
- tayl-* (*tayl-*) 'to push' (2559)
- teyl-* (*teyl-*) 'to winnow (flour) gently' (2827)
  - (contrast *tol-* (*toly-*) 'disparages good qualities of' (2902))
- et-* (*eyt-*) 'to carry' (681)
  - (contrast *et-* (*ety-*) 'to fight' (731))

(iv) In all other cases there is no metathesis (note that there is no metathesis of *ry* even after *u:*), e.g.

- a:t-* (*a:ty-*) 'to expose to fire' (346)
- a:r-* (*a:ry-*) 'to become cool' (346)
- e:r-* (*e:ry-*) '(advice) is listened to' (776)
- op-* (*opy-*) 'to be acceptable, accept' (781)
- o:d-* (*o:dy-*) 'to read' (886)

*kulk-* (*kulky-*) 'to shake (tr.)' (1501)  
*jo:r-* (*jo:ry-*) '(tears and snot) run in streams' (2353)  
*ti:r-* (*ti:ry-*) 'to be finished' (2683)  
*nak-* (*naky-*) 'to lick' (2945)  
*mag-* (*magy-*) '(light) becomes less' (3890)

6.3.3. Out of the fifteen cases that show the feminine suffix *y*, only six have it with metathesis (it is optional in one); in *nondy* and *ve:dy*, *y* is the agentive suffix.

*vavry*, *vayr* 'woman who has no children' (S853)  
*kayl* 'female thief' (1156)  
*karyp* 'name of a woman' (1175)  
*ku:yk* 'foolish woman' (1593)  
*ma:ym*, *me:m* 'maternal uncle's wife' (3945)  
*mu:ying* 'dumb woman' (4124)  
*kunyy* 'lame woman' (1408)  
*ko:ty* 'Kota woman' (1468)  
*kurdy*, *ku:ry* 'blind woman' (1487)  
*kuly* 'short woman' (1526)  
*ku:ry* 'short woman' (1537)  
*kepy* 'red cow or bitch', *kempy* 'n. pr. woman' (1607)  
*nondy* 'lame person' (3138)  
*parky*, *parkc* 'poor woman' (3256)  
*pa:rvty* 'brahman woman' (3366)  
*pi:ly* 'a weakling (fem.)' (3471)  
*medy* 'dull woman' (4199; given in 4219)  
*ve:dy* 'beggar' (4548)

6.3.4. In the case of the non-morphemic *y*, the following generalisations hold good.

(i) Although metathesis is very common in the case of non-morphemic *y*, it does not take place after a high vowel (i.e. *i*, *u* or *u:*); cases with a long *u:* are not many but there is no instance with a long *it* either for the operation

of metathesis or for its non-operation. *u:ym* 'flour' (548) and *cuyg* 'hair-whorl' (2223) are the only exceptions to the above statement (there is only one instance of my cluster and that too with the secondary stem formative *y*, i.e. *kum-* (*kumy-*) 'to pestle grain' (1536) Examples:

<i>iŋy-</i> ( <i>iŋc-</i> ) 'to crush' (366)	<i>kuŋy-</i> ( <i>kuŋc-</i> ) 'to drink' (1378)
<i>ury-</i> ( <i>urc-</i> ) 'to hate' (565)	<i>guryv</i> 'good aim' (cf. Ka. <i>kuŋi(pu)</i> , 1533)
<i>uŋy</i> 'chisel' (601)	<i>ku:ŋj</i> 'daily wages' (1586)
<i>uŋy</i> 'onion' (606)	<i>gu:ŋy</i> 'bull' (1597)
<i>uny-</i> ( <i>unc-</i> ) 'to think', <i>unyp</i> 'thought' (625)	<i>nuŋy-</i> ( <i>nuŋc-</i> ) 'to pinch' (3079)
<i>giŋy</i> 'extreme fear' (1309)	<i>puŋj</i> 'tiger' (3532)
<i>kiry-</i> ( <i>kirc-</i> ) 'to shout' (1323)	<i>pu:ŋdy</i> 'ashes' (3541)
	<i>pulŋy-</i> ( <i>pulŋc-</i> ) 'to be sour' (3546)
	<i>mu:ŋry</i> 'untamed bullock' (4137)
	<i>viky</i> 'olive' (4446)
	<i>viŋy</i> 'uselessness' (4506)

(ii) The sequence *ny* does not undergo metathesis, e.g.

<i>neny-</i> ( <i>nenc-</i> ) 'to think' (3050)
<i>pany-</i> ( <i>panc-</i> ) 'to think' (3322)

(*payŋ* 'dew' < \**panŋi* (3322) shows metathesis but it might have taken place after \**n* has been replaced by *ŋ*).

(iii) In cases that are not covered by the above two conditionings metathesis operates. Note that an original double consonant is reduced to a single consonant in Kota before metathesis. Cases like *kalyv* and *ke:lyv* show that metathesis operates only once. However, there are many instances of non-operation of the change concerned even under favourable circumstances and these latter have to be considered as

loans taken after the completion of the change. In some of these, other indications confirm their borrowed nature. Examples for metathesis:

*ayv-* (*avc-*) 'to chew' (127) *tayn-* (*tanç-*) '(body) becomes cool' (2473)

*kalyv* 'education' (1090) *nayr* 'jackal' (2981)

*kayl-* (*kałc-*) 'to taste salty' (1145)

*kayr-* (*karc-*) 'to laugh' (1172) *poyr* 'powder' (3667)

*ka:yk, ka:k* 'crow' (1197) *mayn-* (*manç-*) 'to talk' (3822)

*ka:yy* 'reddish cloth' (1249) *mayr* 'young of animals' (3901)

*ta:yv* 'bracken' (2595) *vayr* 'sides of trunk of body' (4308)

*ke:lyv* 'question, words' (1677) *veyr* 'gun' (4502)

Examples for loanwords (mostly from Ba<sup>d</sup>aga):

*an̪dy* 'pot' (110) *ta:ly* 'a heavy necklace' (2594)

*aty* 'country fig' (123) *pały* 'retribution' (3297)

*aky* 'grain' (178) *pa:dy* 'half' (3355)

*a:ny* 'metal nail' (295) *pa:ny* 'a measure' (3394)

*ol̪y(d)* 'good' (855) *piry* 'handful of anything but cooked rice' (note *pic* 'handful of boiled rice, 3412)

*kindy* 'metal drinking vessel' *vary* 'tax' (4307)  
(1289)

*kiły* *vaky* 'parrot' (To. *kiły*  
is also a loan, 1318)

The following loans from Indo-Aryan, which show metathesis, are obviously borrowings that have entered Kota before the operation of the change:

*co:ym* 'god' (DBIA 162)

*ta:ym* 'milet' (DBIA 163)

*ge:ył, geył* 'sport, jest' (*DBIA* 113)  
*caynt* 'market' (cf. *Ka. santi*, *DBIA* 140)

6.3.5. In Kota and Toda, *y* →  $\emptyset$  / Palatal-, e.g. Ko. *kaj* 'barley', To. *koj* (:Ta. *kañci*, 926 & 927), Ko. *inj* 'ginger' (:Ta. *iñci*, 363), Ko. *muc-* (*muc-*) 'to cover', To. *müç-* (*müç-*<sup>v</sup>) (:Ta. *muccu* (*mucci-*), 4025), Ko. *nnj-* 'to fear'. To. *oz-* (*oj-*) (:Ta. *añcu* (*añci-*), 17).

Moreover, in Kota, the following rule is also there:

$$\left[ \begin{array}{c} \{t, t, r\} \\ \{d, l, \text{nt}\} \end{array} \right] + y \rightarrow \left[ \begin{array}{c} c \\ j \end{array} \right]$$

e.g. *a:t-* (*ac-*) 'to seize firmly' (3320), *kat-* (*kac-*) 'to tie' (961), *a:r-* (*a:c-*) 'to dance' (290), *to:d-* (*to:j-*) 'to dig a deep hole' (2927), *puj* 'tiger' (< \**puli*, 3532) and *paj* 'pig' (< \**pan̥ti*, 3326). This loss of *y* must have taken place earlier to metathesis (but after *e*, \**li* → *jy* → *yj*, e.g. *eyj* 'rat' (< \**eli*, 710) and *neyj* 'firesticks' (< \**ñeli*, 2390)).

Finally, it is interesting to note that the non-operation of metathesis in the majority of the instances in the case of morphemic *y* is an example of grammatical conditioning of sound change.

\*i:

## 7.1. Reflexes

7.1.1. PDr. \*i: remains as i: in all the languages.

For special changes in Ko<sup>č</sup>agu and Tu<sup>č</sup>u, see Chapter 17.

Examples:

247. Ta. i: 'fly, bee' *te:n-i:* 'honey bee'. Ma. *i:cca* 'fly' To. *i:py*. Ko. *i:p*. Te. *i:ga* 'fly'; *i:č-t-i* 'a large black bumblebee'. Kol. Nk. *ni:ng-a* 'fly'. Go. *phuk-i:* 'bee'. Kui *pu:k-i*. Kur. *ti:n-i:* 'bee'; *e:xa:* 'gadfly, horsefly'. Malt. *te:n-i* 'bee'. Br. *i:L* 'fly'. (453)

248. Ta. *i:n* (*i:nɒ-* *i:nɪ-*) 'to bear, bring forth, yean, produce'; *i:zam* 'giving birth'; *i:rru* 'bringing forth (applied to animals)'; *i:* (-v-, -nt-) 'to create'. Ma. *i:zam* 'the womb of animals'; *i:rru* 'bringing forth, the infant, young of animals'. Ko. *i:n-* (*i:nɒ-*) 'animal bears young'. To. *i:n-* (*i:ð-*) 'to bear (calf)'; *i:f-* (*i:fy-*) '(goddess) brings forth child, (god) makes to bear (calf)'. Ka. *i:n* (*i:d-*) 'to bring forth young'; *i:duvike* 'bringing forth'; *i:(yu)* (*i:d-*), 'to bring forth'; *i:yisu*, *i:su* 'to cause to bring forth'. Te. *i:nu* (*i:ni-*) 'to bring forth'; *i:ta* 'yeaning, bringing forth young'. Pa. *i:n-* '(grain) produces head'. Br, *i:n-* 'to lamb, kid, calf, etc.' (473).

249. Ta. *ti*: (-v-, -nt-), *ti:y* (-v-, -nt-) ‘to be burnt, charred’; (-pp-, -tt-) ‘to allow food to be charred in cooking’; n. ‘fire’. Ko. *ti:y-* (*ti:c-*) ‘to be singed, roasted’; *ti:c-* (*ti:c-*) ‘to singe’. To. *ti:y-* (*ti:s-*) ‘to be singed’; (*ti:c-*) ‘to singe, roast’. Ka. *ti*: ‘to burn, singe, parch’: n. ‘fire’; *si*: ‘to be scorched, burnt’; n. ‘state of being scorched, burnt’. Tu. *ci:ñci-* ‘to be scorched, burnt’; *ci:nti-* ‘to burn (intr.), roast as a fruit’; *tu: su*: ‘fire, fiery’, Te. *ti:ndra* ‘light, brightness, heat’; *ri:pu* ‘severe pain’. Br. *ti:n* ‘scorching, scorching heat’; *ti:ru:nk* ‘spark’. (2672).

250. Ta. *ni*: (obl. Old *nin(n)-*, Mod. *uŋ(y-)* ‘thou, you (2 sg); hon. *ni:r*. Ma. *ni*: (obl. *nin(n)-*) ‘you (sg.)’. Ko. *ni*: (obl. *nin-/ni-/di-*). To. *ni*: (obl. *nin-*). Ka. *ni:M, ni:n(u)* (obl. *nin(n)-*). Kod. *ni:ni/ni*: (obl. *nin-/ni:-*). Tu. *i*: (obl. *nin-*). Te. *ni:vu, i:vu* (obl. *ni:-, nin-* (-Accusative)). Kol. *ni:v* (obl. *in-*). Nk. *ni:v*. Nk.(Ch.) *i:v, ni:v* (obl. *in-*). Pa. *i:n* (obl. *in-*). Ga.(Oll.) *i:n* (obl. *in-*), (S) *i:n* (obl. *inn-*). Go. *imma:, (A) nimme:* (obl. *ni:-*). Konđa. *ni:n* (obl. *ni:-*). Pe. *e:n, e:neñ* (acc.-dat. *ningen*, gen. *ni:*). Mand. *i:n*. Kui. *i:ñu*, (K.) *ni:nu* (obl. *ni:-*). Kuwi *ni:nu* (obl. *ni:-*). Kur. *ni:n-* (obl. *niñg-*). Malt. *ni:n* (obl. *niñg-*). Br. *ni*: (obl. *ne:-, n-*; enclitic gen., dat., accus. *-ne*). (3051).

251. Ta. *ni:m, nir, ni:yir, ni:ñkał* (obl. Old *num-*, Mod. *um-, uñkał-*), you (pl., honorific sg.)\*. Ma. *ni:ñnał, niññał* *niñnał-*). Ko. *nim* (obl. *nim-*). To. *n̄im* (obl. *n̄im-*). Ka. *ni:m, ni:vu* (obl. *nim(m)-*). Kod. *niñga* (obl. *niñga-*). Tu. *i:ri, nikuļu* (also obl.). Te. *i:ru, mi:ru* (obl. *mi:-, mim(m)-* (-Accusative)). Kol. *ni:r* (obl. *im-*). Nk. *ni:r*. Nk.(Ch.) *i:m* (obl. *im-*). Pa. *i:m* (obl. *im-*). Ga. (Oll.) *i:m*. (obl. *im-*) (S) *i:m* (obl. *imn-*) Go. *immał, (A) mira:ł, (SR) nimeł* (obl. *mi:-*) Konđa. *mi:r(u)* (obl. *mi:-*). Pe. *e:p, e:peñ* (accus.-dat. *miñgen*, gen. *mi:*). Mand. *i:m*. Kui *i:ru*, (K.) *mi:ru* (obl. *mi:-*). Kuwi *mi:mbu*, (Su.) *mi:ru* (obl. *mi:-*). Kur. Malt. *ni:m* (obl. *nim-*). Br. *num* (obl. *num-*). (3055).

252. Ta. *nitr* 'water, juice, moisture'; *i:r* 'moisture', *i:ram* 'wet'. Ma. *ni:r* 'water, juice, moisture'; *i:ram*, *i:gam* 'moisture, dirt'. Ko. *ni:r* 'water'. To. *ni:r*, *i:rm* 'dampness'. Ka. *ni:r* 'water'; *i:ra* 'moisture'. Koq. *ni:ri* 'water'. Tu. *ni:ri*. Te. *ni:ru*, (pl. *ni:llu*). Kol. Nk.(Ch.) *i:r*. Pa. Ga. (Oll., S.) *ni:r* Konda *ni:r masu* 'mist, dew'. Kui *ni:r* 'juice'. Br. *di:r* 'water, juice, sap'. (3057)

253. Ta. *pi:* 'excrement, faeces'; *pi:ccu* (*pi:cci-*) 'to purge'; *pi:-kkai*, *pi:ccaiñ-kai*, *pi:ccai-kkai* 'left hand'; *a:-ppi* 'cow-dung'. Ma. *pi:* excrement of man, birds, etc., wax of the ear, mucus'. Ko. *pi:* 'excrement'. Ka, *pi:*, *pe:* 'man's dung'. Tu. *pi:* 'excrement'; *picca*, *picce* 'left (hand)'. Te. *pi:yi*, *piyyi*, 'excrement (of human beings)'. [Kol. *pi:ya* 'excrement'. Nk, Pa. Ga. (Oll) *pi:..* Go. Pe. Mand. Konda *pi:n*. Kui. *piu* (pl. *pi:nga*). Kuwi (Su. P) *pi:nga*. Kui. *pi:k* 'excrements, earwax'. Malt. *pi:ku* 'excrements'. Br. *pi:* 'excreta, esp. of human beings and birds'. (3455).

[In Toda, PDr. *i:* normally remains as *i:* but there are a few exceptions. Emeneau (1970:37) notes: "There are two exceptions. To. *ii:ruf* 'liver': Ko. *i:ruv*. Ta. *i:ral*, *i:ruł*. Ma. *i:ral*, Ka. (Ziegler) *hi:ri* (465), is inexplicable at present. In To. *pu:ly* 'good-for-nothing fellow' : Ko. *pi:l* 'weakly', *pi:l(n)* 'a weakling', fem. *pi:ly*, Tu. *pi:li* 'dry, thin, light, Te *pi:la* 'thin, lean, stunted', *bu:li* 'worthless, pithless' (3471), the labializing influence of *p-* might be invoked; there is actually no other sure example of a To. word which represents PDr. \**pi:-*". Also cf. To. *ku:l* 'hinge of box' besides *ki:s* 'handle'. Ta. Ko. Ka. *ki:l* 'joint, hinge', Te. *ki:lu* (1346)].

### 8.1. Reflexes

8.1.1. PDr. \**u* remains as *u* in all the languages but in Toda it is represented by *ü*, *i*, \**o* and *u*.

For the alternation of \**u*/*o* in South-Dravidian and Telugu, see chapter 15.

For the special changes in Toda, see 8.2.

#### Examples:

254. Ta. *uṇ* (*uṇp-/uṇṇuv-*, *uṇṭ-*) 'to eat or drink'. Ma. *uṇ* 'to eat (esp. rice), suck'. Ko. *uṇ-* (*uḍ-*) 'to drink, suck'. To. *uṇ* (*uḍ-*) 'to drink, (child) takes breast, (rain) rains'. Ka. *uṇ* (*uṇd-*), *uṇṇu*, *umbu* 'to eat what forms a person's real meal, or (with regard to children) mother's milk'. Kod. *uṇṇ-* (*vmb-*, *uṇd-*) 'to eat a meal'. Tu. *uṇ-* (*uṇd-*) 'to take one's meal, eat rice'. Kol. *uṇ-* (*und-*) 'to drink'. Nk. Nk. (Ch.) Pa. Ga.*uṇ-* (*uṇd-*). Go. *uṇ-* (*uṭṭ-*). Konda *uṇd-* (*uṭ-*). Pe. *uṇ-* (*uṭ-*). Manda *uṇ-* (*uc-*). Kui *uṇ-* (*uṭ-*). Kuwi (Su) *uṇ-*. Kur. Malt. *oṇ-* (*ond-*). Br. *kun-* 'to eat, drink, bite, suffer, endure'. (516).

255. Ta. *utir* (-*v-*, -*nt-*) 'to drop off (as leaves, fruits), drop down (as tears), be demolished'. Ma. *utir-* 'to fall, drop, moult (as feathers)'. To. *wiθ-* (*wiθy-*) '(waistcloth) slips off'.

Ka. *udir*, *udaru*, *udur* 'to fall, fall down or off, drop'. Tu. *uduru-*, *udari-* 'to fall, drop off, hang down'. (526)

256. Ta. *uł* 'to be'; (*uṇtu* 'is, are (existence)'). Ma. *uł*, *uṇtu*. Ko. *oł-* (*od-*) 'to exist'. To. *wiłd-* (*wiđ-*) Ka. *uł*, *oł* 'to be' (*uṇtu*). Kođ. Tu. *ułł-*, (*uṇdi*). Te. *undu* 'to exist', *un(u)cu* 'to place, put, keep'. Br. *ann-* 'to be' (present 1 sg. *uł*, 2sg. *us*, 1 pl. *un*, 2pl. *ure*, 3pl. *ur*). (599).

257. Ta. *kuttu* (*kutti-*) 'to puncture, pierce. bore, dig'. Ma. *kuttu-* (*kutti-*). Ko. *kut-* (*kuty-*) 'to pierce, sew, gore'. To. *kut-* (*kuty-*) 'to pierce, sew'. Kođ. *kutt-* (*kutti-*) 'to thrust, gore'. Tu. *kuttu-* (*kuty-*) 'to bore, pierce'. Go. (Mu) *guhc-*, (Ma.) *gu?c-* 'to pierce, poke'. Konda *gut* 'to sew'. Pe. *kund-* (*kunt-*) 'to punch with fist, pierce with spear'. Mand. *kut-* 'to punch with fist'; *kund-* (*kunt-*) 'to pierce, prod'. Kui Kuwi (Su,) *kut-* (-*it-*) 'to prick'. Br. *xutt-* 'to dig', probe'. (1429)

258. Ta. *nunku* (*nunki-*) 'to swallow, devour'; *noṇku* (*noṇki-*) 'to swallow'. Ko. *nung-* (*nungi-*) 'to gulp down without chewing'. To. *nug-* (*nugy-*) 'to gulp down'. Ka. *nungu* 'to swallow, devour'. Tu. *ningi-*, *dingi-* (*dingy-*) 'to swallow'. Kur. *nunux-* 'to gulp hastily, devour'. Malt. *nunG-* 'to swallow'. Br. *nuGush-* 'to swallow, devour, gulp down'. (3064).

259. Ta. *puli*, *pul* 'tiger', Ma. *puli*. Ko. *puj*. To. *püsy*, *üly* (< Badaga *huli*). Ka. *puli*, *huli*, Tu. *pili*. Te. *puli*. Kol. Nk. *pul*. Nk (Ch.) *pul(a)*. Ga. (Oll.) *berpul*, (S) *pulu* (pl. *pulkul*) Go. *pulli:*, (Koya) *pul* (pl. *pulk*). (3532).

### 8.2. PDr. \**u* > To. *ü*, *i*, \**o* and *u*.

8.2.1. Emeneau (1970: 41-43) himself has provided solutions for some of the aspects of this problem of complex Toda developments although he did not state the differentiating conditioning factors for the occurrences of Toda *wa*, *wi* and *u* (further, the conditionings he gave for *ü* and *wa* have to be modified, see below).

$*u > \ddot{u} / - \{ *i, *y, *cc \}$   
 $> i / \left\{ \begin{array}{l} \text{Labial} - *a \\ - \text{Labial} + *a \end{array} \right\}$   
 $> \text{Pre-Toda } *o / \left\{ \begin{array}{l} \text{Non-labial} \\ \# \end{array} \right\} - \mathbf{C} *a$   
 $> u \text{ elsewhere.}$

8.2.2.  $*u > \text{To. } \ddot{u} / - \left\{ \begin{array}{l} *i \\ *y \\ *cc \end{array} \right\}$

PDr.  $*u$  changes to  $\ddot{u}$  before  $*y$  (see examples 547 and 549),  $*cc$  (To.  $cc$ ) or before  $*i$  ( $>$  To.  $y$ ) of the next syllable<sup>1</sup>.

Examples: (examples 547–551 also properly belong here).

260. To. *üry* ‘sweat’ : Ko. *ury-* (*urc-*) ‘to hate’.

n. ‘envy, heat (esp. of the sun), sweat’. Ka. Ka. *uri* ‘to burn, n. burning, flame, blaze’. (565)

261. (= 259) To. *püsy*, *üly* (< Ba $\ddot{d}$ aga *huli*) ‘tiger’ : Ta. Ma. Ka. Te. *puli*. (3532)

262. To. *tüby* ‘sp. honey-making insect’ : Ta. Ma. *tumpi* ‘bee’. (2731).

1. To. *küd-xas*, *küds* ‘large rock standing by itself’ (: Ta. *kun $\ddot{t}$ am*, *kun $\ddot{t}$ u* ‘hill’ (1548) is unexplainable unless it is from *\*kun $\ddot{t}$ i(l)*; the derivative *-i(l)* does not occur in any other language. DED 1550 (Ko. *ku $\ddot{t}$*  ‘bundle’ To. *ku $\ddot{t}$*  ‘bundle of firewood or grass’ < *\*kun $\ddot{t}$ (u)* is probably relatable to DED 1548 with the meanings ‘hill, mountain’. In that case, the assumption of the derivative *\*-il* to explain the Toda words in 1548 is quite essential.

By this rule, the back vowel  $*u$  is fronted while retaining the rounding, because of the following front vowel or a palatal. The rule may be stated in terms of generative phonology as follows:

V
+
Back
+
Round
+
High
—

$\rightarrow [-\text{Back}] / - [\text{-Back}]$

263. To. *tüb-* (*tüby-*) 'to sneeze': Ta. Ma. *tummu* (*tummi-*) *tumpu* (*tumpi-*). (2740; in this, the past stem ends in \**i* (> To. \**y*) which causes the change of the root \**u* to *ü*; the presence of *ü* in the non-past stem is analogical to the past stem.)

264. To. *tüt-* (*tüty-*) 'to wander around': Ta. Ma. *cuttu* (*citti-*). (2238; as in the above case, *ü* in the non-past is analogical to that in the past stem. The initial \**c* does not condition this development as evidenced by examples 322-324).

265. To. *püLy* 'tamarind', *püLy-* (*püLc-*) 'to be sour'; Ta. Ma. *puḷi* 'to turn sour, n. tamarind'. (3546)

266. To. *müLy* 'sp. thorny plant, penis': Ta. Ma. *muḷli* 'thorny plant'. (4098)

267. To. *müc-* (*müc-*) 'to cover', *mücxu*: 'lid, cover': Ta. Ma. *muccu* (*mucci-*). (4025)

268. To. *nüc* 'broken rice, chips': Ma. *nuccu*, Ko. *nuc*. Ka. *nurcu*, *nuccu*. Kod. *nucci*. (3089)

269. To. *ü:r* 'finger-nail, toe-nail'; *ü:r-xon* 'end of finger-nail': Ta. Ma. *ukir*. (479)

270. To. *pü:L* (< \**purił*) '*Ilex wightiana*': Baḍaga (Lush.) *hurułu* (3521)

270a. To. *ü:r*, *usir* 'life (the latter is a loan)': Ta, *uyir*. Ka. *usir*. (554).

Also see DED 2223, 2709, 2764 and 3407.

8.2.3. \**u* > To. *i* / { Labial -\**a*  
                  { -Labial +\**a* }

\**u* changes to To. *i* (*i*) when it is preceded by labial (i.e. *p* or *m*) and followed by \*-*a* (including \*-*ay*) and also (ii) before a labial (i.e. \**mp*, \**m(m)* or \**pp*) that is followed by \*-*a* (see examples 278-281). This development is induced

by both a labial and \*a; the labial may either precede or follow the \*u. Note that \*a is essential in the second conditioning because of a different development in examples 262-263.

271. To. *pīñ* 'bamboo milk pot' : Ta. *puñai*, *panai* 'bamboo'. Ko. *pen* 'bamboo milkpot'. (3507)

272. To. *pīdy* 'penis' : Ta. *puñtai* 'pudendum muliebre'. Ko. *pid* (3509)

273. To. *pīl* 'hole in wall, esp. for leading off both-water': Ta. *pułai* 'hole'. Ma. *puła* 'gap in a wall'. Ka. *pole* 'path, road'. (3542)

274. To. *pīr-mun* 'the outside' , Ta. Ma. *puṭam* (3554)

275. To. *mīx* 'open ground in front of village, where people sit and buffaloes are milked' : Ta. Ma. *mukam* 'face, mouth' Ka. *moga*. (4003)

276. To. *mīg* 'nipple' : Ta. *mulai* 'woman's breast'. Ma. *mula*. Ka. Kođ. *mole*. (4087)

277. To. *mīL*, *mīł* 'shoot of plant' : Ta. *mułai*. Ma. *muła*, Ka. *mołe*, Te. *molaka*. (4100)

278. To. *tīb* 'various *Leucas* species and *Anaphilis* species': Ta. *tumpai* 'white dead nettle, *Leucas*'. Ma. *tumpa*, Ka. *tumbe*, *tumbi*. (2738)

279. To. *kīp* 'rubbish' : Ta. *kuppam*, *kuppal*, *kuppai*, 'heap': Ma. *kuppa*. Ka. *kuppe*, *guppe*. (1440)

280. To. *kīm* 'gourd' : Ta. *kumpalam* 'wax-gourd'; *kummaṭti* *kommaṭti* 'a small water-melon'. Ka. Kođ. *kumbała* 'pumkin'. Te. *gummađi*. (1455)

281. To. *kīmf-* (*kīmt-*) 'to beat (drum), kill' : Ta. *kumi* (-*pp-*, -*tt-*) 'to overpound (as rice)'; *kumai* (-*pp-*, -*tt-*) 'to beat or pound in a mortar' (1536(c)).

282. To. *pī:l-* (*pī:ɻ-*) 'to tumble over or down'; *pī:t-* (*pī:ɻy-*; 'to push over or down': Ta. *puraɻ*, *piraɻ* 'to tumble over'. *puraɻtu* 'to turn a thing over'. (3516)

#### 8.2.4. PDr. \**u* > pre-To. \**o* (before C<sub>a</sub>) > To. *wa*.

Emeneau (1970 : 41-42) noted that in the instances that show the development PDr. \**u* > To. *wa* (i) the following syllable contains \**a* or \**ay* and (ii) the \**u* is not preceded by the labials *p* or *m* (\**u* in the sequence \**p/m u Ca/ay* remains as *u* in pre-Toda)<sup>2</sup>.

2. Emeneau (1970: 42) observed that: “\**u* in the sequence \**p/m u Ca/ay* remains as *u* in To.”. While there are only two instances for this, there are a greater number of cases where the \**u* in that context changed to *i* (this inconsistency was noted by him on the next page). Examples for \**u* → *i*/Labial -\*C(C) *a(y)* are given in 8.2.3 (also cf. To. *miɻ* ‘relationship by blood or marriage’ < \**muɻay* (DED 4115), To. *mīn* ‘sharp point’ < \**muɳay* (DED 4119)). The two cases in which \**u* appears to be retained are the following:

(i) To. *pūrf-* (*pūrɪ-*) 'to winnow': Ta. *puʈai*. Ka. *pode* 'to strike'. (3493)

(ii) To. *muʈn* 'winnow': Ta. Ma. *muʈam*. Ka. *mora*, *mara* (4106)

Emeneau's (1970: 42) example for this, viz., To. *muʈ* (-θ-) 'to become angry' is directly related to Ta. *muʈuku* 'to be haughty' rather than to Ta. *muʈai* (-*pp-*, -*tt-*) 'to become stiff' (if the Toda verb were related to the latter Tamil verb, it should have had the shape *muʈf-* (*muʈt-*)). Therefore the above two are the only relevant examples. The loss of \**a* in the derivative \*-*am*/\*-*ay* in Toda seems to be much earlier to the vowel changes in the root syllable (see p. 56); since \**muʈan* changed to \**muʈn* by the time of the change of the root \**u*, it remained unaffected in this case. In the case of To. *mū:g* 'hare' < \**muyal* (example 551) also, the loss of \**a* in \*-*al* took place first and then the changes \**u* → *ü* and the loss of *y* and compensatory lengthening operated in that order. After removing these two cases from consideration, only *pūrf-* remains. It is a difficult case to explain; since

He has also noted that the above statement is not complete because in a few cases *wi* also occurs before \**a*. He left the matter there with the following concluding remarks (1970: 42): "In fact, it has been impossible so far to find a phonological statement that will include all examples of *u*, *wi*, *wa*. It is possible that in future part of the answer for the varying developments of \**u* and \**o* may be found to depend on which of the stages in the SDr. development of \**u* and \**o* before \**a* Toda is most closely related to.....". From this, it is obvious that we must also look at the consonants that follow the root vowel in order to be able to distinguish between the two developments *wa* and *wi*. Another point we have to note is that in pre-Toda, PDr. \**u* regularly changed to \**o* before the sequence \*-C *a* unless it is preceded by a labial (*p* or *m*), in which case, it is retained unchanged. Therefore, we can assume that

all the southern languages uniformly show \*-ay, it would be ad hoc to say that it was not there in Toda. However, Tu. *poditonyu-* 'to struggle' and Te. *poðucu* 'to fight' somewhat support us in saying that the derivative in this verb in pre-Toda was \**u*.

A more important point is that \**u* has not changed to \**o* in pre-Toda between a labial and \*-Ca as between a non-labial and \*-Ca (see examples 271, 273, 274-277, 281, 282, 551 and DED 4115, 4119). In some of the examples, that is, in 274 (cf. Ta. *pigitu* 'the other'), 275 (cf. \**mu:kk-* 'nose', 4122), 281 (cf. Ta. *kumi*), 551 (cf. Pa. *mū:da*, Ga., NDr.) and DED 4119 (cf. \**mun* 'front') \**u* rather than \**o* seems to be the PDr. vowel. \**u* may be the original vowel in the rest of the cases also. If \**u* had merged with \**o* in pre-Toda it should have changed to \**pwa-* > *pa-*, \**mwa-* > *ma-* in these cases; such a development is in fact found for PDr. \**o* (see examples 543-546). It is clear from this that PDr. \**u* has not merged with \**o* in Toda after a labial (and before \*-Ca); Emeneau's statement quoted above is therefore valid for pre-Toda.

PDr. \**u* and \**o* merged together in pre-Toda into \**o* before \*Ca (but not after a labial) and then this pre-Toda \**o* changed into To. *wa* (see also 12.2.2.) In other words, the original, i.e. PDr. quality of the root vowel in such cases will be of little relevance to the study of the Toda developments (except after a labial).

It is notable that most of the instances of the change, pre-Toda \**o* > To. *wa* contain a non-nasal alveolar (\**r*, \**t* or \**l*) after *wa* while the remaining contain \*-ay in the next syllable. It is better to consider this as the conditioning for \**o* > *wa* since the change \**o* > *wi* does not take place before an alveolar or \*ay. We already know that PDr. \**a* is retained before a non-nasal alveolar and also before \*ay in the next syllable (see 4.2.). It is clear that these two developments are inter-connected and that in Toda *a* rather than *o* is preferred before an alveolar (there are only two cases of *o* before \**r*, viz., examples 558 and 560; no other alveolar consonant follows *o*). This makes it clear that the following alveolar or \*ay must have played a role in the change of \**o* > *wa*. Therefore the rule may be formulated as follows:

Pre-Toda \**o* > To. *wa* / —  $\left\{ \begin{array}{c} \text{*Non-nasal} \\ \text{alveolar} \\ \text{*ay} \end{array} \right\}$   
 > To. *wi* elsewhere

Pre-Toda \**o*, which is the reflex of either PDr. \**u* before Ca but not after *p/m* or PDr. \**o*, changes to To. *wa* before an alveolar consonant or \*ay. Although the alveolar is followed by \**a* in the instances given below, there are clear cases like *iwary* (example 506, this is noted by Emeneau (1970: 41) as an exception), *wasy* (example 535) and *kwayy* (example 541) in which the alveolar is not followed by \**a(y)*. Therefore it is enough if we give the alveolar as the conditioning factor; it is immaterial as to what vowel follows it.

The above rule, then, applies to examples 283–292 as well as to examples 506, 534–542. It applies also to example 543–546 but a later rule, namely  $w \rightarrow \emptyset /p-$  simplifies the cluster \* $pw$  by deleting the  $w$ .

Examples:

283. To. *warf-* (*wart-*) ‘to rub into paste- wipe, wash’: Ta. *urai* (-v-, -nt-) ‘to be reduced into a powder or paste’; (-pp-, -tt-) ‘to rub into a paste’. (572)

284. To. *wask* ‘grain pounder’: Ta. *ulakkai* ‘pestle’ Ma. *ulakka*. Ko. *elk*. Ka. *olake*. (580)

285. To. *wak* ‘small bamboo vessel’ : Ta. *ulakku* ‘measure of capacity’. Ma. *ulakku*. Ko. *olk*. (587)

286. To. *waṛx-* (*waṛxy-*) ‘to sleep’; *waṛk-* (*waṛky-*) ‘to make to sleep (by lullaby, etc.)’; *waṛk* ‘sleep’. Ta. *uṛaṅku*, *uṛaku* ‘to sleep’ *uṛakku* ‘to put to sleep’; *uṛakku*, *uṛakkam* ‘sleep’. (606)

287. (= ?60). To. *kwar* ‘umbrella’ ; Ta. *kuṭai*. Ka. *Kode* (1386)

288. To. *kwarg* ‘monkey’ : Ta. *kuraṅku*. (1473)

289. To. *kwarf-* (*kwart-*) ‘to snore, bark’: Ta. *kurai* (-pp-, -tt-) ‘to bark, shout’; n. ‘shout’. (1496)

290. To. *kwad-* (*kwadθ-*) ‘to rot’; *kwa:w* ‘decayed dead body’ : Ta. *kuḷai* (-v-, -nt-) ‘to become soft’ mashy’. (1514)

291. To. *kwaṛ-* (*kwaṛθ-*) ‘to be reduced in size or esteem’; *kwar* ‘defective in physique, character, status’; *kwarčil* ‘a lack’: Ta. *kuṛai* (-v-, -nt-) ‘to diminish’; n. ‘defect’; *kuṛaiccal* ‘deficiency’. (1537)

292. To. *kwarf-* (*kwart-*) ‘to cut’: Ta. *kuṭai* (-pp-, -tt-) ‘to cut, reap’. (1544).

8.2.5. \**u* > To. *wi*.

Of the cases given below, those that have *-a* in the second syllable had \**o* in the root in pre-Toda; these cases, therefore, show pre-Toda \**o* > *wi*, which will be discussed in 12.2.3. Therefore, only in six cases To. *wi* appears to correspond to \**u*, namely, in 286–298, 301, 304 and 307; the last two are certainly borrowings. Even in them (except 298) there is evidence for pre-Toda \**o*. Therefore, all these cases come under \**o* > *wi*.

293. To. *wiṛL* ‘chest of body, desire’: Ta. Ma. *uṭal*. (501)

294. To. *wiṛm* ‘things burned at funerals, vessels’. Ta. *uṭaimai* ‘wealth, property’. Ko. *oyrm* ‘jewelry, things in house’. (510)

294a. To. *wiṅx-* (*wiṅxy-*) ‘to wither, dry (intr.)’. *wiṅg-* (*wiṅgy-*) ‘to become scorched by sun’; *wiṅk-* (*wiṅky-*) ‘to wither, dry (tr.), roast (meat)’; *wiṅg id-* ‘to put to dry’: Ta. *uṇakku* ‘to dry (intr.)'; *uṇakku* ‘to cause to kry’. (1517)

295. To. *wiθx-* (*wiθxy-*) ‘to get ready (intr.), be of use’; *wiθk-* (*wiθky-*) ‘to get ready (tr.)’; *wiθfy* ‘help, aid, : Ta. *utavu* ‘to help’; *utavi* ‘help’. (522)

296. To. *wiθ-* (*wiθy-*) ‘waist-cloth slips off’ : Ta. *utir* ‘to drop off (as leaves, fruits)’. (To. < \**ot-*; cf. Ka. *odaru*, 526)

297. To. *wiḍ-* (3 pers. *wiḍ-i*) ‘to exist, be in a place’ (loan because of *i*) < \**oL-* < \**uL* ‘to be’ (cf. Ko. Ka. *oL-*, 599)

298. To. *kwīṣ* ‘shed for small calves’: Ta., Ma. *kuṭi* ‘house’ (1379)

299. To. *kwīṛy-* (*kwīṛc-*) ‘to move violently, thrashing about (snake when attacked, person in convulsion)’: Ma. *kuṭay-* ‘to throw out, shake extremities’. (1385)

300. To. *kwīθil* ‘stammerer’. (lw. < Ka.) : Ta. *kutalai* ‘lisp, prattle of children’. Ka. *kodala* ‘stammerer’. (1418)

301. To, *kwit* 'open place surrounded by thickets': Ka. *ku:iul*, *kuttał*, 'bush, thicket' (1431; the vowel correspondence can be explained by shifting this to 1741 \**keitu* 'bunch, assembly').

302. To. *kwic<sup>v</sup>* 'humbled, low (given in 1472; it should be shifted to 1695 Ta. *koccai* 'meanness'. The Toda word is close to Ta. Ma. *koccu* 'small, young, (Ma.) mean').

303. To. *kwiLx* 'lower joints of calf's leg down to hoof, wrist': Ta. Ma. *kułampu* 'hoof'. Ko. *kołk*, Ka. *kołaga*, *kołagu*, *koñagu*. (1519)

304. To. *kwil-* (*kwild-*) 'to hatch' (\**kol-* < Badaga): Ta. Ka. *kułir-*, *kułlu* 'to sit, rest' (1524).

305. To. *kwic-* (*kwic<sup>v</sup>-*) 'to chop up (wood, etc.) (probably l.w, < Ka. *korcu*, *koccu*). (1544)

306. To. *twilg öd-* (*ödθ-*) '(ball) bounces, (river) goes over rocks': Ta. *tułanku* 'to shake'. (2762)

307. (= 1069) *wit-xuḍy* 'high white anthill (*kudy* 'pit'); *wit-mon* 'id', (*mon* 'earth') (\**otta* < Badaga *hutta*): Ta. *purrū purram* 'anthill'. (3556)

#### 8.2.6. \*u > To. u / — { \*C(Cu) }

PDr \*u remains as u in Toda when it is followed by \*u or no vowel in the next syllable; the \*u of the second syllable may be preceded by a single consonant or a consonant cluster. A number of words that show a \*u identifiable as loans on other grounds.

Examples:

308. To. *ux-* (*uk-*) 'to leak, dribble'; *u:c* (*u:c-*) <sup>v</sup> 'to throw away (dirty water)': Ta. *uku* (*ukuy-* *ukk-*) 'to be spilled, gush forth'. (480)

309. (= 254) To. *uṇ* (*uḍ-*) 'to drink' : Ta. *uṇ*. (516)

310. To. *uf-* (*ut-*) '(fever) affects, burns' : Ta. *uru* (-*pp-*, -*tt-*) 'to burn, smart' (565)

311. To. *u:l-* (*u:ḍ-*) 'to roll (intr.)' ; *u:b-* (*u:ṭy-*) 'id. (tr.)'; *u:l* 'ball (of butter, food, etc.), handful' : Ta. *uruḷ*, 'to roll', *uruṭṭu* 'id. (tr.)'; *uruḷi*, *uruḷai* 'wheel'. (571a).

312. (= 781) To. *uṣf-* (*uṣt-*) 'to plough' : Ta. *uḷu* (592)

313. To. *uL* 'the inside; in, into' : Ta. *uḷ* (600)

314. To. *uLy* 'branding iron' : Ta. *uḷi* 'chisel'. (601; the reason for the absence of \**u* > *ü* is not known; probably a loan.)

315. To. *kuṣ* 'room (in diary or house)' : *kuṛy* 'Hindu temple' (both l.w.): Ta. *kuṭi* 'house'. Ka. Te. *guḍi* 'temple' (1379).

316. To. *kuṭ-* (*kuṭy-*) 'to knock, pound': Ta. *kuṭṭu* (1391)

317. To. (*koy-*)*kuṭy* (l.w.) 'handcuffs' : Ta. (*kai-k*)*kuṭṭai* (1394)

318. To. *kut-* (*kutiy-*) 'to pierce'; *kut* 'sewing': Ta. *kuttu*. (1429)

319. (= 280) To. *kubil ko:y* (l.w.) 'pumpkin' : Ta. *kumpalam* 'wax-gourd'. (1455)

320. To. *kuṛy* 'aim' (probably l.w.; but why *r*?). Ta. *kuṭi* (1533)

321. To. *kuṭx-* (*kuṭxy-*) 'to be short'; *kuṭk* (*kuṭky-*) 'to shorten (tr.)' : Ta. *kuṭuku* 'to grow short'; *kuṭukku* 'to shorten'. (1537)

322. (= 1016) To. *tuṛ-* (*tuḍ-*) 'to burn (tr.)': Ta. *cuṭu*. (2183)

323. (= 617) To. *up* 'salt' : Ta. *uppu* (2201a)

324. To. *tu:ṛ-* (*tu:ṛy-*) ‘to shrink (intr.)’; *tu:l-* (*tu:d-*) ‘to pull legs close to body (e.g. while sleeping)’: Ta. *curul* ‘to shrivel, shrink (as leaf)’. (2213)

325. To. *tuḍy-* (*tuds-*) ‘to move in a circle, lounge, loaf about’; (*fude-*) ‘to turn (tr.) in a circle’ (probably l.w.); Ta. *cūli*. (2223)

326. To. *tud* ‘piece’: Ta. Ma. *tunṭam*, *tunṭu*. (2712)

327. To. *pux-* (*puk-*) ‘to enter’ : Ta. *puku*. (3481)

328. To. *puṛf-* (< \**puṭuv-*; *puṛt-*) ‘to winnow’; *puṛ* ‘beating’: Ta. *puṭai* ‘to winnow’; ‘blow’ : (3493)

329. To. *puṭy* (-l.w.) ‘bottle’: To. *puṭṭi*. (3503)

330. (= 1170) To. *puf* ‘worm, intestinal worm’: Ta. Ma. *puḷu*. (3537)

331. To. *muļx-* (*muļxy-*) ‘to be destroyed’: *muļk-* (*muļky-*) ‘to destroy’ (both are loans because of the presence of *l*); *mu:x-* (*mu:xy-*) ‘to be destroyed, drown’; *mu:k-* (*mu:ky-*) ‘to destroy’; *mu:xc-* (*mu:xc-*) ‘river) drowns; ‘is deep; destroy’: Ta. *muļku* ‘to bathe’, *muļukku* ‘to immerse (tr.)’. (4096)

332. To. *muṛn* (obl. *muṛt-*) ‘winnow’: Ta. *muṛam*. (4106)

333. To. *muṛ-* (*muṛθ-*) ‘to become angry’; *muṛk-* (*muṛky-*) ‘to be on bad terms with’: Ta. *muṛai* (-*pp-*, -*tt-*) ‘to become stiff’; *muṛukku* ‘to be proud’ (411a; the Toda form seems to be from \**muṛu-* with *-u* as the derivative rather than *-ay*; the past suffixes in To. and Ta. are different; see footnote 2 on p. 96)

Also see DED 534, 571(b), 572 (*ud-*), 1530, 1536(b), etc. for further instances of loanwords.

### 8.3. The enunciative *u*.

8.3.1 In a number of Dravidian languages, there are words ending in *u*, which, however, need not be considered as part

of the word because it is always elided when a word beginning with a vowel follows. Caldwell (1956: 134-135) noted this phenomenon and gave the name 'enunciative *u*' to this *u*, which is "largely used, especially at the end of words, for euphonic purposes, or as a help to enunciation"<sup>3</sup>. The languages that contain it are Tamil, Malayalam, Kodagu, Kannada, Tuṇu, Telugu, the Koya dialect of Gondi, Konḍa, Kui, Kuwi, Parji,<sup>4</sup> (one dialect of Gadba) and Malto. It is a noteworthy fact that in some of the languages (some Malayalam dialects, Kannada and Telugu) that the enunciative vowel is *i* rather than *u* after the palatal *y* and in Tuṇu, after *j*. The phonetic shape of the enunciative *u* is unrounded high back vowel (*ɨ*) in the southern languages, Tamil, Old Malayalam, Kodagu, Tuṇu and a few dialects of Kannada while it is rounded in the non-southern languages mentioned above. In modern Malayalam earlier *i* has been replaced by *ə*.<sup>5</sup>

3. Recently William Bright (1975) made a thorough study of the enunciative vowel in Dravidian. Others who studied this from a comparative point of view include Ramaswami Aiyar (1935-1936), Zvelebil (1970:53-54) and Emeneau (1970:153). Bright's article takes into account many of the recent descriptions of the various regional and social dialects of the southern languages, as well as the statements of traditional grammars.

4. Burrow and Bhattacharya (1953:2) note that it is frequent only in the southern dialect but rare in the northern dialect, e.g., *kiccu/kic* 'fire', *cuppu/cup* 'salt'. "Even in the South short forms are those normally found in connected utterances; *ii* is only before a pause, or when the words are pronounced in isolation, that the auxiliary vowel appears".

5. According to Ramaswami Aiyar (1935-36, vol 26:98) this change should have occurred prior to the 16th century. He observes that even in modern Malayalam "in word-compounds and in intimate phrasal combinations" the enunciative *ə* of the first word is replaced by *i* if the second word begins with a consonant.

8.3.2. In Tamil, *kurriyal ukaram* (short *u*, that is *i*) opposed to *murriyal ukaram* (full *u*) has been recognised by traditional grammarians; the former is elided before a vowel but the latter is not. The full *u* occurs only in words of the type (C)  $\overset{\vee}{V}$  Cu; eg. *atu* 'it', *pulu* 'worm', *kocu* 'mosquito', *naṭu* 'middle'. The *i* (short *u*) occurs at the end of words that contain an obstruent (i.e. plosive including *r* or the affricate) before it but are not of the type (C)  $\overset{\vee}{V}$  Cu. N. Kumaraswami Raja (1975:7) following *Tolka:ppiyam, Eluttatika:ram*, sutra no. 407 represented the environments for the occurrence of *i* as follows (it is slightly modified here).

$\left\{ \begin{array}{l} \# \text{ (C) } \overset{\vee}{V} \\ \therefore \\ X \text{ C } \overset{\vee}{V} \\ P \\ N \\ \text{Cont.} \end{array} \right.$	P -
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(where  $\overset{\vee}{V}$  = long vowel,  $\therefore$  = *a:ytam*,  $\overset{\vee}{V}$  = short or long vowel, X = one or more syllables, P = plosive, N = nasal, Cont. = continuant, i.e. *y*, *r*, *l*, *t*, or *d*). Examples are *ka:ṭu* 'forest', *eṭku* 'steel', *kayitu* 'rope', *iruppatu* 'that which exists', *ceyya:tu* 'it will not do', *pattu* 'ten', *ampu* 'arrow'; *koytu* 'having reaped', *teṭku* 'flea' (in all these examples *u* stands for *i* as it does in the Tamil writing system). Further,

The examples given by him are as follows.

*na:ti kaṭattuka* 'to exile' (but *na:t̪θ* 'country' before pause)  
*keṭṭi policcu* 'the bundle was opened' (but *keṭṭθ* 'bundle' before pause)  
*rendi pa:vaiṇaḷ* 'two poor creatures' (but *rendθ* 'two' before pause).

he proved convincingly that the final *u* after *v* in words like *katavu* 'door', *celavu* 'expenditure', *alavu* 'measurement' is a *kurṭiyal ukaram* because *v* in the non-initial position mostly represents an earlier \**p* or rarely \**k*.<sup>6</sup> This is clear from morphophonemic variations, for example, the causative is -*ppi* in strong verbs but -*vi* (<\*-*pi*) in weak verbs other than those that end in a nasal, *naṭa-ppi* 'to cause to walk', *ka:n-pi* 'to show' versus *cey-vi* 'to cause to do'; the verbal noun suffix in certain verbs is -*ppu* in the transitive but -*vu* intransitive, e.g. *acai ppu* 'shaking' versus *acai-vu* (<\**acai-pu*) 'moving'. Moreover, -*vu* freely varies with -*pu* or rarely with -*ku* in a number of forms, e.g. *ali-pu* / *ali-vu* 'destruction', *iyal-pu* / *iyal-vu* 'nature', *aruku* / *aruvu* 'approach', *paṭaku* / *paṭavu* 'boat'.

In spoken Tamil the word final *u* or more generally, *u* in a non-initial syllable is phonetically [i]; in certain dialects, however, the final *u* in words of the type (C)  $\overset{\circ}{V}Cu$  is phonetically [u] if the preceding vowel is a back vowel, e.g. *kuṭu* 'give', *puḷu* 'worm', *kocu* 'mosquito' but cf. *ati* 'it' Moreover, in the spoken language, the enunciative *u* occurs even after words that originally ended in a non-stop consonant (other than *m*) e.g. *kaṇṇu* for earlier *kaṇ* 'eye', *ponnu*

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6. The commentators of *Nannū:l* (sutra 164) considered the final *u* after *v* as a *murrīyal ukaram* presumably because *v* is not a plosive and *kurṭiyal ukaram* occurs only after a plosive. But they had to account for the deletion of it before a vowel by a special rule. There will be no such problem if we consider the *u* after *v* also as *kurṭiyal ukaram*, as shown by Kumaraswami Raja. Also note that the Malayalam grammar, *Li:la:tilakam* III. 22 considers the *u* after *v* as *samvṛta* (see Ramaswami Aiyar 1935-36:97). As pointed out by Kumaraswami Raja (1975), Ramaswami Aiyar (1935-36: 92-93; Bright (1975:19) too followed him) was misled by the traditional commentators in considering the final *u* after *v* as *murrīyal ukaram*.

for earlier *pɔŋ* 'gold', *kallu* for earlier *kal* 'stone'; also note that in words containing more than one syllable, the final *y*, *l*, or *t* is dropped except when it is followed by clitics beginning with a vowel, e.g. *ma:nka:(y)*, *vanta:(l)* 'if comes' *ava(l)* 'she'.

8.3.3. In Old Malayalam, the enunciative  $\partial$  occurs after words ending in an obstruent provided that they are not of

the canonical form (C) $\overset{\vee}{V}Cu$  and also optionally after words ending in *l*, *t*, *n*, *n̪* or *r* e.g. *ka:t $\partial$*  'forest', *kaŋ*, *kaŋŋ $\partial$*  'eye', *viral*, *viral $\partial$*  'finger', *curuł*, *curuł $\partial$*  'curl', *ka:l $\partial$*

'leg'. In words of the (C) $\overset{\vee}{V}Cu$  type, *u* is always rounded and it is not elided before a vowel, unlike  $\partial$  e, g, *maŋu* 'wart', *naŋu* 'middle', *kuru* 'boil', *puŋu* 'worm', *Li:la:tilakam* expressly mentions that after *v* the final vowel is  $\partial$  but not *u*, as in *ałav $\partial$*  'measurement', *kałav $\partial$*  'theft' (see footnote 6 on p. 106) *Li:la:tilakam* (III, 5) also notes that the final vowel in *at $\partial$* . is  $\partial$ .<sup>7</sup>

In spoken Malayalam, the enunciative  $\partial$  occurs in words that originally ended in a consonant, stop as well as non-stop except in words of the type (C) $\overset{\vee}{V}Cu$  (see Bright 1975 for details). The Pulaya dialect, however, shows both *i* and *u* as

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7. In Old Tamil, according to the grammarians the *u* in *atu*, *itu*, *utu* must be the full *u* because they come under the pattern (C) $\overset{\vee}{V}Cu$ . Accordingly, the vowel is not elided before a clitic, e.g. *atu-v-e:* 'that itself'. But it is elided before suffixes that begin with a vowel, e.g. *at-aŋ-ai* 'it (accus.)'. After *atu*, *itu*, the following plosive is not doubled contrary to the general rule requiring the doubling of a plosive after *u*. (*Tolka:ppiyam*, *eluttatika:ram* sutrams 255, 258). Ramaswami Aiyar (1935-36:93) thinks that even in earlier times, the *u* in these words has been weakened to *i* foreshadowing the later development in the language.

free variants after (C)V<sup>Y</sup>C, e.g. *pari/paru* 'a boil'. Ramaswami Iyar (1935-36:96, footnote 8) observes: "In the colloquial, the enunciative is embodied almost always (except in intimate compounds) before pauses and consonants in words like *kaṇṇə̤*, *ka:lə̤*. The pronouns *ñā:n*, *avan*, *aval*, *avar* and the participial nouns involving the three last-mentioned forms do not generally embody *ə̤*. Original dissyllabic (and trisyllabic) words do not generally have *ə̤*". In the standard dialect, *u* occurs at the end of finite verbs while *ə̤* occurs at the end of past adverbial participle, e.g. *kaṇṭu* 'saw' versus *kaṇḍə̤* 'having seen'; however, in answering a question, *ə̤* instead of *u* is used even in finite forms, e.g. *kaṇṭo:* 'did you see?', *kaṇṭə̤* '(yes,) I saw'. In the substandard dialect *ə̤* instead of *u* occurs in finite forms. In the standard dialect *ə̤* instead of *u* is found in two finite verbs *uṇṭə̤* '(subject) is (there)' (contrast *uṇṭu* '(subject) ate') and *a:nə̤* 'is', which latter is used as a copula. Final *u* occurs also in proper names like *ponnu* (contrast *ponnə̤* 'gold') and in such cases the *u* is elided in sandhi.

In Mapila Malayalam of South Kanara district, Mysore (see Bright 1975: 29-32), words of the (C)V<sup>Y</sup>Cu type contain *u* at the end, e.g. *beru* 'wild cat'; *kalu* 'vulture', *nađu* 'hip' and this *u* is not elided in sandhi. In other types of words, the enunciative is *i* after *y*, e.g. *na:yi* 'dog', *u* after a labial or a back vowel in the preceding syllable, e.g. *onnu* 'one', *nu:ru* 'hundred', *ca:vu* 'death' and *i* elsewhere, e.g. *pa:li* 'milk'.

8.3.4. In Kođagu, the enunciative vowel is *i*, e.g. *kalli* 'stone', *ponni* 'wife, female' but it is *u* after *v*, e.g. *na:vu* 'tongue' (see 17.6). In words of the (C)V<sup>Y</sup>Cu, the final

vowel is *u* as in Tamil-Malayalam. Final *u* also results from the loss of the *m* in the permissive suffix \*-um.

8.3.5. In Old Kannada and many modern Kannada dialects, the enunciative vowel is rounded *u* but it is *i* in some dialects like the Gowda dialect and the dialect of Sivalli Brahmins of Barkur, South Kanara. After *y*, it is *i*, e.g. *na:yi* 'dog'. In Old Kannada, the enunciative *u* occurs only after a stop, the affricates *c* and *j*, *s(ku:su* 'child') and *v* (*korvu* 'fat'); words ending in a nasal or one of the consonants *y*, *r*, *t*, *l*, *ɻ* and *ɿ* do not take enunciative *u*, e.g. *kay* 'eye', *na:m* 'we', *mey* 'body', *ni:r* 'water' *basiɻ* 'stomach', *kal* 'stone' *muɻ* 'thorn', *ba:ɻ* 'life'; in modern Kannada on the other hand, the enunciative vowel is added to all words that originally ended in a consonant, e.g. *kappu* 'eye', *na:vu* 'we', *ni:ru* 'water', etc. (see Ramachandra Rao 1972:18). While the enunciative

vowel is elided before a vowel, the *u* in words of the (C)V<sup>V</sup>C<sub>u</sub> type is not elided, e.g. *naðu* 'middle', *magu* 'child', *puðu*, *huðu* 'worm': *maguvu-in-a* 'of the child'. "In the northern Kannada area, several dialects are reported to have replaced some cases of final *u* with [ð]..." (so Bright 1975:37). U.P. Upadhyaya (1976: 264-265) notes this change in the Gulbarga dialect, e.g. *ugrð* for *uguru* 'nail', *bislð* for *bislu* 'sun's heat', *mðnnð* for *mannu* 'mud'.

8.3.6. In Tužu, the enunciative vowel is *i* with the variant *u* which latter occurs after a rounded (back) vowel or a labial consonant (the labial consonant and *u* may be separated by another consonant), e.g. *pari* 'tooth' *ka:ri* 'leg', *parndi* 'ripe fruit', *na:di* 'country' *kaʈṭi* 'tie', *pudari* 'name' but *ponnu* 'girl', *uccu* (kind of) snake', *i:m̥lu* 'kind of leech', *avu* 'that', *kukku* 'mango', *urulu* 'noose', *je:vu* 'girl', *jo:vu* 'child', *kappu* 'blackness', *urdu* 'blackgram'. Besides, *i* occurs as the enunciative after *j* as in *oñji* 'one', *mu:ji* 'three', *a:ji* 'six' and also preceded a long vowel, e.g. *na:yi* 'dog', *ba:yi* 'mouth'

there is no enunciative after *y* if it is preceded by a short vowel as in *kay* 'hand'. In contrast with the enunciative, basic *u* occurs in words which are of the type (C)  $\overset{\circ}{V}Cu$  right from the original stage (note *pari* < \**pal*), e.g. *nađu* 'middle', *puru* 'snail, worm', *kađu* 'hard, firm' and also in some suffixes like the plural suffix-(*k*)*lu*, e.g. *pili-klu* 'tigers, (note that the final *i* of the stem changes to *u* under the influence of the *u* of the plural suffix : *kanñi* 'eye', pl. *kanñu-lu*, *e:đi* 'goat' pl. *e:đu-lu*).

8.3.7. In Telugu (Old and Modern) the enunciative *u* (rounded) occurs after all consonants, e.g. *kađu* 'tie', *nippu* 'fire', *illu* 'house', *mra:nu* 'tree', *manamu* 'we(incl.)', *vanamu* 'forest', *dhanamu* 'wealth'. In Old Telugu, a number of suffixes end in *n*, and the enunciative is optional in these, e.g. *na:-kun(u)* 'to me' *vanamu-lo:n(u)* 'in the forest' (the *n* is also optionally lost before consonants other than voiceless stops or before pause). The enunciative after *r* or *l* is also optional in Old Telugu before a consonant e.g., *kan(nu)-do:yi* 'a pair of eyes', *vil(lu) virice* 'he broke the bow' *janul(u)* 'people'; it is so very rarely after *r*, *vattur* (*va:ru*) 'they will come', for the more common *vatturu*. The *u* in the plural suffix *-lu* after a polysyllabic word is optionally dropped not only before a consonant but also before pause: *vanamul(u)* 'forests'. In Modern Telugu the enunciative *u* is obligatory but after words ending in *m* it is not added, e.g. *manam* 'we (incl.)', *mancam* 'bedstead'.

8.3.8. In Kui, the enunciative *u* (rounded) occurs in nouns that originally ended in a consonant but it does not occur before the plural suffix, e.g. *ko:ru* 'buffalo', pl. *ko:r-ka*; *kanu* 'eye', pl. *kan-ga:* *sa:pu* 'thorn', pl. *sa:p-ka*; *sra:su* 'snake', pl. *sra:s-ka*; *tu:tu* 'stomach', pl. *tu:t-ka*. (see W.W. Winfield (1928: 14-15). This alternation shows that the

enunciative in Kui is not basic and it is a later addition. A similar situation obtains in Kuwi also.

8.3.9. In Kon̄da, the enunciative *u* appears only ‘in slow narration or before a phrase or utterance final juncture’ (Krishnamurti, 1969:214) e.g. *ma:p(u)* ‘we (excl.)’, *ma:t(u)* ‘we (incl.)’, *nōres(u)* ‘tiger’ *e:l(u)* ‘now’. Kon̄da has *i* also as the enunciative after *r*, *t*, *l*, or *y* in slow speech. e.g *gunder(i)* ‘saree’, *tamber(i)* ‘younger brother’, *ambel(i)* ‘porridge’, *za:y(i)* ‘day light’. The enunciative does not appear before the pl. suffix as in the case of Kui, e.g. *kopu* ‘braid of hair’, pl. *kop-ku*; *peni* ‘louse’, pl. *pen-ku*; *ambu* ‘arrow’, pl. *ap-ku*.

8.3.10. Burrow and Bhattacharya (1953:18; 1963:245-246) have noted the additional (or enunciative) *i* in Parji, certain Gon̄di dialects, Kui and in Kuwi (in the latter it is very common). Normally this *i* disappears before suffixes or in compounds. In Parji, it appears normally after *n*, *r* or *l* but also after other consonants; it is very common in connection with the names of trees and their fruits, e.g. *pe:ni* ‘louse’, pl. *pe:n-ul*; *meri* ‘tree’, pl. *mer-kul*. *mer to:l* ‘bark of tree’; *ku:ki* ‘mushroom’ pl. *ku:k-ul*, *bedri* ‘bamboo’ (Te. *veduru*), *e:li* ‘pipal’, *irpi* ‘mahua’ (Te. *ippa*), *kalli* ‘threshing floor’. In Kuwi it occurs usually after *l* or *r* (also after words originally ending in *m*, which are all loans from Telugu), e.g. *hepori* ‘broom’, pl. *hepor-ka*; *muñgeli* ‘nose’, pl. *muñgel-ka* (cf. Kui *muñgeli*, pl. *muñgel-aka*), *ne:romi* ‘fault’ (< Te. *ne:ram*), pl. *ne:romi-ka*; cf. also the infinitive suffix *-ali* and the 2nd and 3rd person plural suffix *-eri*. The 3rd sg. masculine suffix in Kuvi, i.e. *-esi* also contains this additional *i*, (cf. Kui. *-enju*). Te. *kañali* ‘sea’ (:Ta. *kañal*) also shows this kind of *i*.

8.3.11. In conclusion, we can state that, as pointed out by Bright (1975:16), that the enunciative vowel in general is “a

nonbasic, predictable feature of Dravidian phonology, and that contrasts of [i] and [u] are a matter of surface structure, not deep structure". It originally occurred only after words ending in an obstruent but in the later stages it was extended even to words ending in non-obstruents. The *u* at the end of

words of the (C)VC*u* type is not enunciative but it is part of the stem as evidenced by Tamil-Malayalam and Kannada; such words are extended by the addition of another syllable in Telugu, e.g. *puru* 'worm' < \**pulu*, *madugu* 'pool' < \**maṭu*, *krovu* 'fat' < \**kolu*. It is at present impossible to say whether the enunciative vowel was originally unrounded [i] or rounded [u]; none of the non-southern languages show [i]. One could, however, argue that it was originally [i] and that it was rounded to u after a back vowel or a labial as in Tulu (and Mapila Malayalam) and then the *u* was generalised in languages like standard Kannada and Telugu. Emeneau (1970:153) holds that the [i] in some of the Southern languages as secondary while Bright (1975:41) considers [i] to be the original and [u] as secondary. Bright further suggests that the presence of the enunciative in the Central languages other than Telugu is due to diffusion. The *u* in standard Kannada as opposed to *i* in the non-standard dialects and other southern languages may also be due to diffusion from Telugu. The enunciative *i* is also attested after palatals in some southern languages and mostly after *l* or *r* in some of the central languages (note that in Old Tamil *kurriyal ukaram* changes to *i* (*kurriyal ikaram*) before *y*, e.g. *pa:kku+ya:tu>pa:kki ya:uu* 'which is the areca-nut').<sup>8</sup>

8. Zvelebil (1970: 53-54) wrongly considers the *i* in the Telugu words *padi* 'ten', *mari* 'and, again', *masi* 'dirt' and *mudi* 'old' as enunciative. The *i* in these can only be a derivative although it is not found in the other languages. The *i* in *padi* is actually part of the *ca:riyai -iṇ-*, cf. Ta. *pattu*, *pat-in-onṇu*, etc.; the original nominative form has been replaced by the adjectival form due to analogy.

\*U;

### 9.1. Reflexes

9.1.1. PDr. \*u: is represented by u: in all the languages.

For the change of \*u: > i: in Kota, see Chapter 18.

Examples:

334. Ta. Ma. Ko. u:r 'village, town, city'. To. u:r 'village of Tamils or Badagas'. Ka. u:r, 'village, town'. Kod. u:ri. Tu. Te. u:ru. Kol, Nk. u:r (pl. u:dl). Br. ura: 'house, wife' (643).

335. Ta. Ma. ku:tu 'nest, hive, pen, kennel, cage'. Ko. gu:ṛ (obl. gu:ṭ-) 'nest, belly'; gu:ṛa:rm 'body cavity'. To. ku:d 'nest'. Ka. Tu. gu:du 'nest, cage'. Kod. gu:di. Te gū:du. Pa. gu:ra. Ga. (Oll.) gu:de; (S.) gu:du. Go. gu:da:; ku:ṭinj 'a stone fall-trap such as boys set for birds' Pe. gu:da. Kui. ki:renji. Kuwi. ku:da. Malt. ku:ṭgle 'the hoop or spring of a kind of mousetrap'. (1563).

336. Ta. nu:l 'yarn, cotton thread, systematic treatise, science'; (nu:ṭp-, nu:ṭṭ-) 'to spin, compose (as a poem)'. Ma. nu:l 'to spin; n. thread'. Ko. nu:l 'thread'. To. nu:g. nu:gf- (nu:st-)

'to join ends of thread by rolling'. Ka. *nu:l* 'yarn'; (*nu:lt-*) 'to make thread, spin'; *nu:lige* 'spinning'. Ko $\delta$ . *nu:li* 'thread'. Tu. *nu:lu*; *nusloqu* 'spindle'; *nu:l* (*nu:t-*) 'to spin'. Te. *nu:lu* 'cotton thread'. Kol. (Kin.). Pa. Ga. (Oll). Go. *nu:l*, Konda *nu:lu* 'thread'. Pe. *nu:l*, *no:n-* (*no:t-*) 'to spin'. Mand. *nu:l* 'thread'. Kui. *nu:du* (pl. *nu:tk*a); *no:l-* (*no:t-*) 'to spin' Kuwi (Su.) *lu:lu*, Kur. *no:y-*, *nō:y-* 'to wind or twist anything flexible, twist grass or creeper into rope'. (3087),

337. Ta. Ma. *nu:tu* (obl. and in cpds. *nu:ttu-*) '100'; *nu:ttuvar* '100 persons' Ko. *nu:r* '100'. To. *nu:t*. Ka. *nu:tu*; *nu:rvar* '100 persons', Ko $\delta$ . *nu:ri* (obl. *nu:it-*). Tu. *nu:du* (obl. *nu:ta-*), *nu:tra*. Te. *nu:tu* (obl. *nu:ta-*); *nu:ttuvuru*, *nu:ttuguru* '100 persons' Go. *nu:r* (pl. *nuhk*) '100' (3090).

338. (=7) Ta. *pu:* 'flower, cataract in eye'; (-*pp-*, -*tt-*) 'to blossom'; *pu:ppu* 'flowering'. Ma. *pu:*, *pu:vu* 'flower'; *pu:-* 'to blossom'. Ko. *pu:* flower'. To. *pu:f*; (*pu:t-*) 'to bloom' Ka, *pu:* (*pu:t-*) 'to flower' n. 'flower'; *pu:vu*, *hu:vu* 'flower'. Ko $\delta$ . *pu:*, (Mercara dialect) *pu:vi*. Tu. *pu:;* *pu:mbe* 'the flower bud of a plantain'. Te. *pu:, pu:vu, puvvu* 'flower' *pu:cu* 'to blossom'; *pū:ta* 'flowering'. Kol. *puv*, (Kin.) *pu:ta*. Pa. *pu:t* (pl. *pu:vul*); *pu:p-* (*pu:t-*) 'to flower'. Ga. (Oll.) *pu:* (pl. *pu:l*) 'flower'; *pu:p-* (*pu:t-*) 'to flower'; (S) *puvvu* 'flower'; *pu:k-* (*pu:t-*) 'to flower'. Go. *puṅga:r*, *puñña:r* 'flower'; *pu:y-* 'to flower'; Konda *pu:n* 'flower'; *pu:* 'to blossom', *puyu* 'flowering'; Pe. *puy* (pl. *-ku*) 'flower'; Mand. *puy* 'flower'. Kui *pu:ju* (pl. *puṅga*) 'flower'; *pu:-* (*pu:t-*) 'to blossom'. Kuwi (Su. P.) *pu:yu* (pl. *puṅga*) 'flower'. Kur. *pū:p-*, (Hahn) *pu:mp* 'flower'; *puyd-*, *puid-* 'to bloom, flower'. Malt. *pu:pu* 'flower'; *puth-* 'to blossom'. (3564).

339. Ta. *pu:n* (*pu:np* (*pu:nt-* 'to put on, wear'; *pu:ttu* (*pu:tti-*) 'to lock, yoke' n. lock(ing)'). Ma. *pu:n-* 'to be yoked'; *pu:ttu*

'to lock, yoke'; n. 'lock, yoking'. Ko. *pu:r-* (*pu:ry-*) 'to yoke'; *pu:t-* (*pu:ty-*) 'to fit (tr.) into sheath (at smithy)'. To. *pu:l-* (*pu:d-*) 'to wear around neck'; *pu:t-* (*pu:ty-*) 'to tie around someone else's neck'. Ka. *pu:n-* (*pu:nd-*) 'to fix (as an arrow); n. admission'; *pu:du* 'to join (tr.), yoke'. Te. *pu:nu* 'to undertake'; '*pu:n(u)cu* 'to yoke'. *pu:nika*, *pu:n(i)ki*, *pū:pu* 'attempt'; *pū:ta* 'security'. Go. *puh-* 'to yoke, plough'; *po:nd-* 'to put on a dhoti (of men only)'. Konḍa *pu:ndi* 'a yoke'; *put-* (-t-) 'to fasten bullocks to the plough, yoke'. Pe. *pu:t-* (-t-) 'to yoke'. Kui *pu:r-* (*pu:rt-*), *pu:t-* (*pu:tt-*), *pu:nd-* (*pu:ndi-*) 'to meet, n. act of meeting'. Kuwi (F) *pu:t-* 'to yoke'. Kur. *pund-*, *pundur-*, 'to pass round one's neck'; *pu:n* 'necklace'. Malt. *pu:n-* (*pund-*) 'to put on one's own neck (as a necklace)'; *pund-* 'to put on another's (a wreath or necklace)'; *pu:nu* 'necklace, garland'. (3577).

340. Ta. *mu:ytu* 'three'; *mu:var* 'three persons'. Ma. *mu:nnu*; *mu:var*. Ko. *mu:nā*; *mu:r*. To. *mu:θ*. Ka. *mu:tu*; *mu:var*. Kod. *mu:ndi*; *mu:vē*. Tu. *mu:ji*; *mu:veri*, *muvver*. Te. [ *mü:du*; *mu:vuru*, *mugguru*. Kol. Nk. *mu:ndin*; *muggur*. Nk (Ch.) *mu:ndi*; *mug(g)ur*. Pa. *mū:du(k)*; *mu:vir*. Ga. (Oll.) *mund*; *mu:vir*, Konḍa *munḍri*; *mu:yer*. Kui. *mū:*, *mu:nji*; (K.) *mu:nji*; *mu'ar*, Kur. *mu:nd*; *nubb*. Br. *musit*. (4147)

9.1.2. In the following five cases, Toda shows some vowel other than *u*: (*i*:; *yut* or *i*:) corresponding to PDr. \**u*:. In the last two cases, the Proto-Dravidian vowel might have been \**i*:, which changed to *u*: after the labial *p-* in languages other than Toda.

341. To. *ki:x* 'owl' : Ta. *ku:kai* (1552)

342. To. *kyu:n* 'mushroom' : Ma. *ku:n*, *ku:nu*, Ko. *ki:n*. Tu. *gu:nu*. (1573)

343. To. *ti:γ* 'the sacred tree *Meliosma pungens* and *Wightii*: Ko. *tu:γ marm* 'id, hill mango' Bad. (lush.) *tode* (2779)

344. To. *pi:x id-* (*ič-* 'to break wind silently': Ma. *pu:ccī* a fart' Ka, *pu:su* 'to break wind'. (3571)

345. To. *pi:l* 'chip of wood, splinter'. Ma. *pu:l*, Tu. *pu:lu* (3589)

### 10.1. Reflexes

10.1.1. PDr \*e remains as e in most of the languages; the following are the exceptions:

(i) In Toda it is represented by e, ö, i or ii (10.2)

(ii) In the Northern dialects of Gondi like the Betul dialect (described by Trench) and in Muria, \*e > a but in the other dialects it remains unchanged (12.4)

(iii) In a few instances, Parji has a instead of the normal correspondence e (10.3)

(iv) In Brahui, \*e changes to a or i (10.4)

For \*e > Ka. i / - high vowel, see Chapter 19.

For i / e alternation in South Dravidian and Telugu, see Chapter 15.

#### Examples:

346. Ta. Ma. *erutu* 'bull, ox, steer'. Ko. *et*. To. *est*. Ka. *ettu*, *eddu*; *ełtu*. Kod. *ëtti*, Te. *eddu* (pl. *eđlu*); *eddu pađtu* 'to geld (an ox)'. Kol. *ed* (pl. *edl*)' 'bull' Nk. *hedđ* (pl. *hedł*). Kur. *addo*: (698)

347. Ta. *erumai* 'female buffalo'. Ma. *erima*, *eruma*. Ko. *im*. To. *ir*. Ka. Kod. *emme*. Tu. *erme*; *eru* 'male buffalo' Te. *enumu* 'female-buffalo'; *enu(pa)* 'of the buffalo'; *enupo:tu* 'male-buffalo', *enu pen̄ti* 'female buffalo'. Go. *armi:*, (L) *ermi:*, (A) *hermi:*. (699)

348. Ta. Ma. *eli* 'rat, bandicoot', Ko. *eyj*. To. *isy*, Ka. *eli*, *ili* Kod. *eli*. Tu, *eli*. Te. *eluka*, Kol. Nk. *elka*. Nk. (Ch) *elli* (pl. -*g*), Pa. *el* (pl. *elkul*); *ci:r el* 'bandicoot'. Ga. (Oll) *sir-el* 'mouse (i.e. small rat)'; (S) *ci:rel* 'rat'. Go. *alli:*, (A) *elli:* (pl. *elk*). Konḍa *elka*. Pe. *orli*, Mand. *urli*. Kui. *ođri*; (K) *ori'i*. Kuwi (Su, P.) *orli*; (D) *or'i*. Br. *al*. (710)

349. Ta. *elu* (-v-. -nt-) 'to rise (as from seat or bed); *elnppu* (*eluppi-*) 'to cause or help to rise' Ma. *elu* 'to rise; n. height'; *e:lu*- 'to rise (hon. of *ra:ja's* moving). Ko. *ev-* (*erd-*)' (smoke) rises up, fly'; (*ert-*) 'to make to spring up from position'. To. *öd-* (*ödθ-*) 'to rise'; *örf-* (*ört-*) 'to carry'; *ört-* (*örty-*) 'to arouse from sleep'. Ka. *el*, *e:l* (*eld-*), *e:lu* (*edd-*) 'to rise'; *elbu*, *ebbu* 'to rise'. Kod. *ë:l-* (*ë:v-, ëdd-*) 'to get up'; *ëpp-* (*ëppi-*) 'to raise'. Tu. *erk-* 'to rise or collect (as water in a place)'; *erp-* 'to lift up'. Kui. *de:nj-* (*de:nji-*) 'to be raised, weighed'; *de:sp-* (*de:st-*) 'to raise, lift'; *dehk-* (*dehki-*) 'to carry on the shoulders'. Kuwi (Su.) *dek-(-it-)*. Mand. *de:k-*. Br. *e:f-*, *arf-* 'to raise'. (723a)

350. (i) Ta. *cevi* 'ear', *ceviṭu* 'cheek'; *cevił* 'tragus'; *cevuł* 'gills'. Ma. *cevi* 'ear'; *cevi-* 'to hear'; *ceviṭu*, *cekiṭu* 'ear, chiefly the inner part'; *cevi-ppi:*, *ceppi* 'ear-wax'; *ceppi* 'ear'; *koviṭu* 'cheek'. Ko. *keyv*; (Kurgo:j dialect) *kev* 'ear'. To. *kify*. Ka. *kivi*, *kimi*. Kod. *kevi^n*. Tu. *kebi*. Te. *cevi* Kol, Nk. Nk. (Ch.) *kev*. Pa. *kekol*. Go. (Oll.) *kekol*. (S) *kekko:l*. Go. *kev*; (Tr.) *kawi:* Konḍa. *gibi*, (Sova dial; BB) *giton̄i*. Pe. *kitul*. Mand. *giy* (pl. *-ke*). Kur. *xebda:*. Malt. *qethwu*. Br. *xaf*. (1645a).

(ii) Ta. *ceviṭu* 'deafness, deaf person'. Ma. *ceviṭu*, Ko. *kevr.* To. *kyu:ḍ.* Ka. *kivuḍu*, *kivaḍu*, *kivuḍ* 'a deaf person'. Tu. *keppu* 'deafness'; *keppe* / *kebure* 'deaf man'. Te. *cevuḍu* 'deafness,; *ceviṭi* 'deaf'. (1645b)

351. Ta. *neytto:r* 'blood'. Ko. *neṭr.* To. *nets<sup>v</sup> xar*, *nötiṣ<sup>v</sup> xar* (in songs; *kar* 'juice'); *nöts<sup>v</sup>*. Ka. *nettār(u)*, *nettara*, Ko. *netta ca;ncī* 'sp. sandalwood which is red'. Tu. *netteri*. Te. *netturu* Kol. Nk. *nettūr*. Nk. (Ch.) *ettur*. Pa. *netir*; *netro* 'red' Ga. (S) *nettū:r*, (P.) *netir* 'blood'; *netraṭ* 'red'. Go. *nattūr*, (A) *nettū:r* 'bloor'. Konda Pe. Mand. *neter*. Kui *nederi* balance word with *raka* 'blood' (< Oriya). Kuwi (F) *netori*; (Su.) *neteri*. Br. *ditar*. (3106)

352. Ta. *nel* 'rice, paddy, grain of paddy'. Ma. *nel* 'paddy'. Ko. *nel*; *nel aky* 'husked rice', To. *nes<sup>v</sup>* 'rice (in songs); *nesiṣky* 'rice, (*asky* 'rice'). Ka. *nel(lu)*. Ko. *nelli*. Te. *nellū:ru* n. pr. (name of a town). (3112)

#### 10.2. PDr. \*e > To. e, ö, i, ii

10.2.1. The Toda developments of PDr. \*e were noted by Emeneau (1970: 44–46) although he did not state the differentiating conditioning factors for e and ö. He has noted in addition the conditioning factors for the heightening of \*e to pre-Toda \*i (see 10.2.4)

#### 10.2.2. PDr. \*e > To. e / - Non-nasal alveolar.

\*e remains as e in Toda before an original non-nasal alveolar consonant (\*r, \*l, \*l') which is sometimes lost in the present day Toda<sup>1</sup>. Those words that show e which is or

1. There are only two cases of \*e followed by \*y with Toda etymologies. They are PSDr. \*ey-: To. *in-* 'to say' (DED 737) and PSDr. \*ey-: To. *en-*, oblique base of \*ya:y 'I' (example 1104). In the first case Kota as well as Gondi-Kuwi show *in-* rather than *en-*; Toda *in-* may therefore be

was not followed by an alveolar are easily identifiable as loans.

353. To. *eθy* 'courage' < Ka. *ede*, *edde*, *erde* 'chest, breast, courage'. (683).

354. To. *ef-* (*et-*) 'to shoot (arrow)' (l.w.): Ta. *ey*. Ka. *esu*, *ese*, *isu* (*ecc-*). (691).

355. To. *er-* (*erθ-*) 'to be very bright': Ko, *erv-* (*erd-*) 'to shine brightly (anything except sun)'. (694).

356. To. *ner-* (*nerθ-*) 'to go in a line (people, ants), be in a line (trees), sit in a line'; *ner* 'row, line', *nerm* (obl. *nert-*) 'companion in journey'; *er-* (*erθ-*) 'to sit in rows, walk in singlefile': Ta. *nira* 'to arrange in order', *nirai* 'to place or be in a row'. (3042)

357. To. *erxy* '*Eleusine coracana*': Ko. *eri*. Ta. *ira:ki*. Ma. Ka. Tu. Te. *ra:gi*. (695)

358. (=346). To. <sup>v</sup>*est* 'bull': Ta. *erutu*. (698)

359. To. *eIf* 'bone' (l.w.); *piɖ-eʂp* 'heel' (*piɖ-* 'behind'): Ta. *elumpu* 'bone'. Ko. elv. Ka. *elu(yu)*. (714)

370. To. *ely* 'boundary' < Ka. *elle* (720)

361. To. *eɻal* 'ease, easy' (l.w.): Ta. *eli* 'easy'. (727)

362. To. *ery* (*ets-*) 'to throw, cut': Ta. *eʈi*. (731)

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from \**iŋ-* rather than \**ɛŋ-*. Therefore, the second case is the solitary instance for To. *e* < \**e* before \**ŋ*. However, in the case of the other non-high short vowels, namely, \**a* and \**o* only the non-nasal alveolar consonants are responsible for special developments and \**ŋ* does not go together with the other alveolars. Therefore, for the sake of uniformity, a non-nasal alveolar consonant has been given as the conditioning factor in the case of \**e* too. The *e* in To. *en-* in the second case above might have remained unchanged due to analogy with *em-*, oblique base of \**ya:m* 'we (excl.)' (example 1105).

363. To. *er-* (*erθ-*) 'to scoop up (water with vessel)': Ta. *ırəi*. Ka. *ere*. (735)

364. To. (all in songs) *kek* 'smile, laughter'; *keks<sup>v</sup> iðad* 'making noise of laughter' (all l.w.s): Ta. *kekkaṭṭam* 'loud laughter', (1608)

365. To. *ke* (*no:y*) 'wild (dog)' (l.w.): Ka. *ke-* 'red'. (1607)

366. To. *kek* 'an art' (l.w.): Ko. *kek*, *keky* 'work (< \*key-kai; cf. Ta. *ceykai* 'act'. (1628)

367. (=938) To. *kef<sub>g</sub>* 'udder': Ta. *ceruttal*. (1632)

368. (=939) To. *kerf* 'shoe': Ka. *kera(vu)*, *kerpu*. (1633)

369. To. *kec* 'linking the hands in dancing' (l.w.); Ka. *keccu* 'the knot which is formed by twisting'. Tu. *kerci* 'a knot' (1635)

370. To. *kelc* 'out door work' < Ka. *kelasa* 'work'. (1639)

371. To. *kelc-* (*kelc<sup>v</sup>-*) 'to be successful' (l.w.) < Ka. *gel*, *gellisu* 'to win'. (1641)

372. To. *keṛf-* (*keṛt-*) '(water) is dammed, (crowd) gathers'; *keṛ* 'party, side'; *ser* (l.w. < Ta. *citai*) 'imprisonment': Ka. *kir* (*kett-*) 'to confine'; *kere* 'tank'. (1648)

373. To. *ker* 'NE monsoon (sept.-Dec.)': Ko. *ker*. (1650)

374. To. *sed* 'ball' (l.w.): Ta. Ma. *centu*. Ka. *cenḍu*, *senḍu*. (2275)

375. To. *teb* 'copper' (l.w.); *tō(b)* *bīLy* 'copper ring' (in songs): Ta. *cempu* 'copper, gold, metal vessel'. (2282)

376. To. *teg-* (*tegy-*) 'to fasten loin-cloth': Ta. *ceruku* 'to insert'. Ka. *serku*, *sekku*. (2285)

377. To. *tergy* 'corner of garment': Ka. *seranku*, *seragu*, *sarangu*, *saṭagu*. (2298)

378. (=1098). To. *nep* 'live coal': Ta. *neruppu*. (2389)

379. To. *tegy* 'half coco-nut shell used as ladle': Ko. *tegy* (both l.w. < Ka. *teṅga:y*, *teṅgina ka:yi* 'coco-nut'). (2806)

380. To. *teṭ-* (*teṭy-*) 'leisure is'; *teṭn* 'opportunity': Ta. *teṭu* 'to tarry', Ko. *teṭ-* 'opportunity or time is'. (2831)

381. To. *nex* '*Carduus pycnocephalus*, a kind of thistle': Ko. *neg* (3095; cf. Ta. *neruñcil*, *neruñci* 'cow's thron, *Tribulus terrestris*'. Ma. *ñeruññil*. Ka. *nerigilu*, *neggilu*, 2388; both these entries must be combined),

382. To. *nes-* (*nesθ-*) 'to weave' (l.w.): Ta. Ma. *ney*. (3103)

383. To. *ner-* (*nerθ-*) 'to go' be or sit in a row': Ta. *nirai*. Ko. *nerv-* (*nerd-*). (3042)

384. To. *es* 'leaf, petal': Ta. *ilai*. Ma. *ila*. (423)

385. To. *pe-* 'big', *pes-* (*pexy-*) 'to become stout': Ta. *peru(m)-*, *peruku*. (3613)

386. To. *pep* 'coagulent agent put in fresh milk'; *perf-* (*pet-*), *pesf-* (*pest-*) <sup>v</sup> '(ghee or milk) solidifies': Ka. *pet-* (*pett-*) 'to thicken'; *heppu* 'curdling agent'. Te. *perūgu* 'curds'. (3621)

387. To. *perp* 'act of birth' (in songs); *per* 'days from the third to the eighth after newmocn': Ta. *piṭavi* 'birth'; *piṭa* 'crescent moon'. Ka. *pere*. (3622)

388. To, *perk-* (*perky-*) 'to pick up small objects': Ta. *perukku*. (3623)

389. To. *mesx-* (*mesxy-*) '(thlnq) becomes soaked and softened'; *mesk-* (*mesky-*) 'to soak (tr.)': Ta. *melku* 'to become soft'. (4167)

390. To. *pen* 'butter' (l.w.): Ta. *ven-ney*. (4511)

391. To. *pem* 'waist, hip': Ta. *verin*, *ven*, *ven* 'back'. (4518)

392. To. *pe:l-* (*pe:d-*) '(buffaloes) are frightened and run away'; *pe:t-* (*pe:ty-*) 'to frighten (buffaloes)': Ta. *veruł*, *viral* 'to be frightened'; tr. *verułtu*. (4519)

393. To. *pešk* 'flying-fox'; Ta. *veruku* 'wild cat'. (4520)

394. To. *per* 'empty, mere': Ta. *veru*. (4538)

#### 10.2.3. PDr. \*e > To. ö /- Non-alveolar consonant.

\*e changes to ö in Toda before a non-alveolar consonant.

395. To. *öök-* (*öky-*) 'to scratch oneself': Ta. *eħku* (*eħki-*) to pull with fingers (as cotton); Ko. *ek-* (*eky-*) 'to scratch (oneself, an itching limb)'. (652)

396. (=918) To. *öť-* 'eight': Ta. Ma. *eťtu*. (670)

397. To. *öñ-* (*öny-*) 'to count'; *öñm* (obl. *oñt-*) 'counting, numbers': Ta. *eñnu* 'to count'; *eñnam* 'mathamatics'. (678)

398. To. *öfir* 'openly, (to lie) on one's back', Ta. *etir* 'that which is opposite'. (680)

399. To. *öθk-* (*öθky-*) 'to jump': Ko. *edk-* (*edky-*): (684)

400. To. *kō-* 'rek': Ka. *ke-*. (1607)

401. To. *kōđm* (obl. *kōđt-*) 'live coal': Ka. *keñda*. (1623)

402. To. *köt-* (*köty-*) to smooth plank with adze, dig (earth with hoe): Ka. *kettu* 'to pare the surface'. (1624)

403. To. *tō(b)* *bīLy* 'copper ring' (in songs): Ta. *cempu* 'copper' (2282)

404. To. *tō(g)* *go:y* 'coco-nut': Ta. *teñku*. (2806)

405. To. *mōť-* (*mōty-*) 'to trample on'; *mōť* 'step, tread, wooden-soled sandal': Ka. *mettu*. (4150)

406. To. *mōty* 'fenugreek': Ta. *mentiyam* (4161)

407. To. *pōt* 'mountain': Ka, *bett̪a*, *bett̪u*. (4503)

408. To. *pōL* 'white': Ta, *vel*. (4524)

409. To. *pōy-* (*pōd-*) 'to burn (intr.)', 'be hot': Ta. *ve:* (*ve:v-* / *ve:kuv-*, *vent-*). (4540)

10.2.4. PDr. \*e > To. *i*, *i* / -  $\left\{ \begin{array}{l} \text{*high vowel} \\ y \\ \text{palatal} \end{array} \right\}$

PDr. \*e has been heightened to To. *i* or *i* (i) before an original high vowel (\**i* or occasionally \**u*) which is often lost in Toda; (ii) before *y*; or (iii) before a palatal consonant (\**c* or \**ñc*). This conditioning has already been stated by Emeneau (1970: 45). This rule, however, is not quite regular as there are many cases that are not affected by it, see examples 346, 362, 378, 388, 398 and 409. Kannada also has a similar rule whereby a mid vowel of the root is heightened to the corresponding high vowel before a high vowel of the next syllable (see Chapter 19). As pointed out by Burrow (1968:31), the Kannada rule must have operated only in a restricted part of the area since variants affected and not affected by the rule occur in the language in many cases. The rule seems to have spread to Toda by diffusion from Kannada (through the Badaga dialect). The rule became more generalised in Toda — it not only included the conditionings other than a following high vowel, i.e. *y* or a palatal but also operated in words that originally contained a consonant cluster between the root and the derivative vowel (see examples 410, 413, 417, 418, 425 and 437). From this it is clear that, in Toda, the rule under discussion operated after the original consonant clusters were simplified (note that in Kannada the rule does not operate if there is a consonant cluster intervening between the root and the derivative vowel). Emeneau (1979) has noted that in the non-initial syllables in Toda, original long mid vowels first

became short and then, in some cases, but not in all they became the corresponding high vowels.<sup>2</sup> This tendency is not conditioned by any following sound unlike in the case of the root vowels.

As regards the development of pre-Toda \*i of these cases into the present day Toda i and ī, it is to be noted that the conditioning that obtains in the case of PDr. \*i>i, ī (see 6.2) does not obtain here, note the examples 427 and 437 which show ī before a palatal. Nor any other conditioning factor is discernible in these cases. It is notable that most of the words with i are easily identifiable as loans but it is difficult to consider words like those in examples 414, 417, 422 and 423 as loans. Paucity of material makes it impossible to give a definitive statement for this development at present. It is to be noted that before s (< \*l) only i is found and this is in agreement with the development of \*e > To. e before a non-nasal alveolar. But before r and ᶻ, which are also alveolars, ī occurs and this makes it difficult to relate this development to the development of \*e > To. e, ī. The matter must be left undecided at present.

(i) \*e > To. i

410. To. *icil* 'pollution of food by being left as a remnant, pollution caused by death or birth' (l. w. < Ta. because of l): Ta. Ma. *eccil*. Ka. *eñjal*. (666).

2. The following table, taken from Emeneau (1979: 229) illustrates this development.

	pre-Toda	Toda
'upon'	*me:l (case suffix)	-mil
1sg.	*-e:n	-en/-in
1pl. exclusive	*-e:m	-em/-im
declarative particle	*-e:	-i
1pl. inclusive	*-o:m	-um
3rd personal	*-o:	-u

411. To. *iṭ-(iṛθ-)* 'to hit with weapon': Ta. *eṭi*. (731)

412. To. *kij* 'bells tied to the ankles while dancing': Ta *keccai*, *keccam*. Ma. *kecca*. Ka. *gejje,gajje*. (1610)

413. To. *ni:sf-* (*ni:st-*) 'to become bruised': Ta. Ma. *ñeri* 'to be crushed'. (2387)

414. To. *nisf-* (*nisθ-*) 'to make fire by twirling firesticks'; *nisy* 'firesticks'; *nig kōṇ* 'hole in fireboard in which stick is twirled to make fire': Ta. *ñeli*. (2390).

415. To. *nilf-* (*nilt-*) 'to whistle, n. act of whistling' (l. w. because of l): Ta. *ñel*, *ñelir* 'to sound'. Ka. *nellu* 'to groan, moan'. (2392)

416. To. *nic-* (*nic-*) 'to darn'; *nes-* (*nesθ-*), *ni:θ-* (*ni:θ-*) 'to weave': Ta. Ma. *ney*. (3103)

417. To. *nig ko:y* 'emblic myrobalan': Ta. *nelli*. Ko. *nel bāṇ*. (3114 & 3115)

418. To. *nity* 'forehead, (l. w. < Ka.): Ta. Ma. *nettī*. Ka. *nettī* (3118)

419. To. *ic-* (*ic-*), *ec-* (*ec-*) '(family) increases' l. w. < Ka. *heccu*, *eccu*. (3613)

420. To. *midy* 'mattress' (l.w. < Ka.): Ta. *mettaī*. Ka. *mette* (4157)

421. To. *midy* 'upper story, (l.w.): Ta. *mettaī*. Te. *middiya*, *midde*. (4158)

422. To. *pirx-* (*pirxy-*) 'to be finished'; *piṭk-* (*pirky-*) 'to finish (work)': Ko. *verg-* 'to be finished, *verk-* 'to finish' (4471)

423. To. *pint-* (*pinty-*) 'ask'; Ko. *vent-* (*veynt-*). (< Proto-To. Ko \*ven-uit-; 4472).

424. To. *piṭyk* (?*piṭky*) 'in vain' :Ta.Ma. *vetti*. (4506)

425. To. *pily* 'silver, anna, Venus, Friday': Ta. Ma. *velli*, (4524)

See also example 348.

(ii) \*e > To. i

426. To. *i*y- (*is-*) 'to know how to': Ta. *ey*. (692)

427. To. *ic-* (<sup>v</sup>*ic-*) 'to reach, be sufficient': Ta. Ma. *eytu*. (693)

428. (= 347) To. *ir* 'female buffalo': Ta. *erumai*, (699)

429. To. *ir* 'depression in anything': Ta. *ezi* 'throw' (731)

430. To. *irb* 'ant': Ta. *ełumpu*, Ka. *iłumpu*, *iruve*. (734)

431. To. *kif* 'shrub': Ta. Ma. *ceti*, Ka. *giđa*, *giđu*. (1613)

432. To. *kiđy* 'abuse' (l.w. because of \*ay >y): Ta. *kentai* 'ridicule'. (1621)

433. To. *kiy-* (*kis-*) 'to do, make': Ta. *cey*. (1628).

434. (= 350). To. *kify* 'ear' Ta. Ma. *cevi*. Ka. *kivi*. (1645)

435. To. *nixy-* (*nixs-*) 'to move slightly on base (e.g. of someone sitting)': Ta. *ñekil*, *nekil* 'to slip off'. (2383)

436. To. *tiry-* (*tirs-*) 'to choose, separate (calves from buffaloes, etc)'; (*tirc-*) to separate, excommunicate'; *tirc-* (<sup>v</sup>*tirc-*) to separate': Ta. *teri* 'to be seen, select'. (2815)

437. To. *niz*, 'heart' Ta. *neñcu*, *neñcam*. (3097)

438. To. *niy* 'ghee': Ta. Ma. Ka. *ney* (3104)

439. To. *miy* 'vulva of animals' :Ta. Ma. *mey* 'body'. (4162)

440. To. *mi:d-* (*mi:dθ-*) 'to look fiercely,: Ta. *merul* 'to fear' *miral* 'to be frightened'. (4164)

Note: In the following two instances, PDr. \*e > ü; the reason for this is not clear at present.

441. To. *üsmic*, <sup>v</sup>*üsmisky* 'lime': Ta. *elumiccai*, Ko. *elmic*; Ka. *ilimiñci*. (712)

442. To. *tüly* 'clear'; *tüly-* (*tułs-*) 'to become clear'. *tülc-*  
(*tülc<sup>v</sup>-*) 'to calm (tr)': Ta. *telī-* 'to become clear' Ka. *tili-*. (2825)

For another special development, cf. To. *kyu:d* 'deafness' (:Ta *ceviṭu*) in example 350 (ii).

10.3. PDr. \*e > Pa. a (also PDr. \*e: > Pa. a: in one case)

10.3.1. This change takes place only in a few items; in all the cases the following consonant is \*r or \*l.

443. Pa. *parṭub*, (S) *parup* 'cream'; Te. *perugu* 'curds'. Kol. *pereg*. (3621)

444. Pa. *marp-* (*mart-*) 'to lighten': Te. *merayu*. Kol. Nk. *merp-*. (4163)

445. (=804) Pa. Ga. *vande* 'finger': Kol. Nk. *vende* (<\*ver-nde; 4436)

10.4 PDr. \*e > Br. a, i.

10.4.1. Emeneau (1962: 10-12) presented the full evidence for the two divergent developments although the meagreness of the material makes the statement of conditioning factors impossible. He says (*ibid*, p.9): "When there is splitting of the PDr. phonemes, it has proved impossible to find the contrastive conditions. The examples are so few in number that, though it would be possible at times to make statements each statement would cover one instance only and such ad hoc statements are not methodologically cogent nor likely to be valid."

10.4.2. \*e > Br. a

"There are eleven certain cases, and a few less certain" (so Emeneau, *ibid.*, p.10).

446. Br. *ane:n* 'sweet' < \*en- (Te. *emme* 'beauty, charm'; Malt. *embe* 'sweet' 451)

447. Br. *ar-* allomorph of *ann-*'to be': Kol. Nk. Pa. Ga.  
*er-* 'to become'. (702)

448. (= 348) Br. *al* 'rat' < \**eli*. (710)

449. (= 349), Br. *arf-* 'to raise, lift up, carry' < \**elupp-*. (723)

450. (= 350), Br. *xaf* 'ear' < \**key(i)*. (1645)

451. Br. *ka?*- (*kas-*, *kask-*) 'to die' < \**ce-*, (2002)

452. (= 609) Br. *daro*: 'yesterday' < \**ner/r-* (~ \**ne:rr-*). (3109)

453. Br. *dar-*, *da-* (*dann-*) 'to cut, take away': Ta.Ka.*neir-*  
'to cut off' (< \**ner-(V)*, 3127)

454. Br. *patti*: 'female' : Ta. *pettai* 'female of animals and  
birds, woman, girl'. (3608)

455. Br. *a-* interrogative stem. < \**e-* (~ \**ya:/e:-*). (4228)

456. (= 1104) Br. *kan-* 1.sg. personal pronoun oblique stem:  
Kur.-Malt.*eng-*, (4234)

The doubtful instances are the following:

(i) Br. (*h)ays- 'to turn something back or round, change,  
get back again, recover, (disease) attacks again'; *harse:ng-* 'to  
turn oneself back, return, turn oneself, round, take a turn, turn  
(of milk), be turned (of the stomach)', *harse:f-*'to make to return,  
withhold': Ta.*itai* 'to retreat, fall back'. Te. *edayu* 'to be  
separated'. Malt. *erar-* 'to keep aloof'. (379)*

(ii) Br. *are*: 'male individual, person, husband': Ta.Ma.  
*e:ru* 'bull, male of certain animals'. (777)

(iii) Br. *cal-*, *cale:ng-* 'to become cracked, split': Tu.  
*sele* 'chink, crack', Kur. *calx-* 'to open, uncover'. Malt *calg-*  
'to split or break open', (1962)

(iv) Br. *kal* 'place where water collects, waterhold': Ka.  
*calame* 'small pit'. Te. *celama*. (1956 & 1961)

## 10.4.3. \*e &gt; Br: i.

"There are fewer instances than for PDr \*e > Br. a, five certain ones and two uncertain" (Emeneau *ibid*, p.ll)

457. (=351), Br. *ditar* 'blood': Ka. *nettār*. (3106)

458. Br. *pir-* 'to swell (of the body or limbs)' < \**per-* 'big, great'. (3613)

459. Br. *mir-* 'to plaster' < \**mel-* 'to smear, daub (esp. with cowdung solution)'. (4169)

460. Br. *biṭ* 'mound, hillock': Ta. *vīṭam*, *vīṭari*, *vīṇṭu* 'mountain'. Ka. *bēṭṭa*, *bēṭṭu*. (4503)

461. Br. \**tir-*, in negative stems *tipp-*, *titt-*, of *ca:-* 'to understand, know': \**te(:)r-* 'to be understood, to understand', (2815)

462. Br. *birr-* 'to separate out, pick out, select, distinguish' < \**ve:l:-*. (4564).

462a; Br. *hikk-* 'to hiccough': Ma. *ekkaṭi* (659; probably the Brahui word is a l.w: < IA; cf. Skt. *hikk-*)

\*e:

### 11.1 Reflexes.

11.1.1. PDr. \*e: remains as e: in all the languages except in Toda which has ö besides e: corresponding to it (see 11.2). Parji occasionally has a: for \*e: (see example 468).

For special developments in Ko<sup>ṭ</sup>agu and Tulu, see Chapter 17.

Examples:

463. Ta. e:nku (*e:nki-*) 'to sound, scream as a peacock, weep' 'wail'; *e:nkal* 'shout, screaming as of a peacock, weeping'. To. ö:x- (*ö:xy-*) 'to scream (peacock or diviner)', ö:xm (obl. ö:xt- 'scream of a peacock or a diviner'. Ko<sup>ṭ</sup>. *e:ngi-* (*e:ngi-*) 'to lengthen note (in singing, crowing)'. (746)

464. Kol. *e:nd-* (*e:nt-*) 'to dance in rejoicing'. Nk. Nk. (Ch). *e:nd-* (*e:nt-*) 'to dance'. Pa. *e:nd-*; *e:tip-* (*e:tit-*) 'to make to dance'. Ga. *e:nd-* 'to dance'; *e:ndin*, *e:ndondi* 'a dance'. Go. *e:nd* - 'to dance'; *e:ndu:s-* 'to cause to dance', Konda *e:nd-* 'to dance'; *e:ti* 'dancing', Pe. *e:nd-* (*e:nt-*) 'to dance, (top) to revolve', *e:t-(-t-)* to make to dance, make (top) spin'. Mand. *e:nd-* 'to dance'; intens. *e:tkā-*, Kui *e:nd-* (*e:ndi-*) 'to dance'; *e:nda* 'a dance': pl. action *e:tk-* (*e:tki-*). Kuwi (Su.) *e:nd-* (-it-) 'to dance'. (757).

465. Ta. Ma. *e:l*, *e:lu* 'seven'; *e luvar* 'seven persons'; *e lu-nu:tu* 700. Ko *e:y* (Sholur dialect *e:g*) 'seven' To. *öw*. Ka. *e:lu*, *e:lu* 'seven'; *e:lbar*, *e:lvaru* 'seven person'; *e:l(u)-nu:tu*, *e-l-nu:tu* 700. Kod *e:li* 'seven'; *övve* 'seven persons' (in songs); *e:l-nu:ri* 700. Tu. *e:li* 'seven'; *e:lveri* 'seven persons'. Te. (inscr.) *e:lu*, *e:du* 'seven'; *e:dvuru*, *e:dguguru* 'seven persons'. Kol. *e:d* 'seven'; *e:dgur* 'seven persons'. Go. *e:yu:n* 'seven'; *e:yi:r* 'seven persons'. Konda *e:yu* 'seven'. Kui *odgi*, *od*; (K.) *ori*; *ori:n go:ri* 140 (772)

466. Ta. Ma. *te:l* 'scorpion'. Ka. *ce:l(u)*, *te:l*, *ce:lu*. Kod *te:li* 'black insect with poisonous bite'. Tu. *ce:li*, *te:li*, *te:li* 'scorpion'. Te. *te:lu*. Malt. *te:le*. Br. *te:L*. (2855).

467. Ta. Ma. *te:tu* (*te:ti-*) 'to be made clear as water, be accepted as true'; *te:rru* (*te:ri-*) 'to make clear, convince'; *te:ram* 'clearness, certainty', Ma. *te:tu* 'to be strengthened, recover'; *te:rru* 'to make strong'; *te:ral* 'clearness, certainty'; *te:ram* 'firmness, faith, trust', Ko. *te:r-* (*te:ry-*) 'to be found satisfactory in one's actions'; dawn'. To. *tö:t-* (*tö:ty-*) 'to improve (in health, wealth)'; *tö:t-* (*tö:ty-*) 'to make improve (in health, wealth)'; *te:l-* (*te:d-*) 'to recover slowly after swoon, do work'. Ka. *te:ru* 'to reach as the end'; *te:rgade* 'success (as in examination)'; *te:ta*, *te:te* 'clearness (of water, etc.) (< Te.) Kod. *te:r-* (*tö:ruv-*, *tö:nd-*) '(man) becomes full-grown'. Tu. *te:li* 'pure, clear' (< Ka. < Te.); *te:rgade* 'settlement'. Te. *te:tu*, *te:ru* 'to become clear or free from suspended matter'; *te:lu* 'to be the outcome or result'; *te:ta* 'clearness, purity', (2856)

468. Ta. Ma. Ko. *ve:r* 'root'. To. *pö:r*. Ka. *be:r(u)*. Kod. *be:ri*. Tu. *be:ri*. Te. *ve:ru*. Kol. NK, *ve:r* (pl. *ve:dl*). Pa. *va:r* (pl. *kul*). Ga. (Oll.) *ve:r*. Konda *ve:la* (pl. *ve:leñ*) Kuwi (F) *ve:la*. (4554)

## 11.2 PDr: \*e: &gt; To. ö:, e:.

11.2.1. Emeneau (1970: 43) noted the two developments with the further observation that *o*: does not appear before *y*. In two instances \*e: > To. *e*: before *y* (examples 471 and 486; also see example 487) and in one instance \*e:, > To. *i*: before *y* (example 482). Another notable feature is that \*e: remains before a derivative *y* (<\**i*; examples 469, 474, 478, 480, 488 and [489a although many of them but not all are loans]). Most of the remaining instances of \*e: > To *e*: are identifiable as loans though to consider the words in example 476 as loans is a bit difficult. It is notable that all the loans from Indo-Aryan (given at the end of 11.2.2) show only *e*:. The word in example 500 with ö: is clearly a loan because of \**p* >  $\phi$  and this must have entered the language before the operation of the change \*e: > ö: while others entered after the change ceased to operate. In conclusion, we can state the rule as follows:

PDr \*e: > To *e*: / - (C) *y*  
 > To ö: / - elsewhere

Other Toda words with *e*: are loans. It would be difficult to say whether Indo-Aryan loans like *e:ny* and *ke:ly* entered Toda before or after the operation of the above rule.

11.2.2. \*e: > To. *e*: / - (C)*y*.

- 469. To. *e:ly* 'poor' l.w. < Ta. *e:lai*. (728)
- 470. To. *e:mo:i-* (*e:mo:ty-*) 'to deceive' l.w. < Ta. *e:ma:tu*. (760)
- 471. To. *e:y-* (*e:c-*) 'to join (pieces or two ends) together': Ta. *e:y* 'to be suited, fit'. (761)
- 472. To. *e:f-* (*e:t-*) 'to receive, take': Ta. *e:l* (766)
- 473. To. *e:r* 'male buffalo, bull': Ta. *e:ru*. (777)

474. To. *ke:ry* 'street of Badaga village': Ka. *ke:ri* 'street' (1669)

475. To. *ke:r* (*fo:b*) 'sp. snake': Ka. *ke:re* 'rat snake, whip-snake'. (1673)

476. To *ke:L-* (*ke:t-*) 'to hear'; *ke:Lf* 'news, word': Ta. *ke:l* 'to hear, ask'; *ke:lv̥i* 'hearing' (1677)

477. (=1023) To. *e:r* 'plough': Ta, Ma. *e;r.* (2313)

478. To. *pe:ry* 'watery buttermilk': Te *perūgu* 'curds' .(3621)

479. To *pe:rf-* (*pe:d-*) 'to be born' : Ta. *petu* 'to beget (3622; doubtful because To.*r:\***r*).

480. To. *e:sy / e:s<sup>v</sup> öd-* (*ödθ-*) 'to dislike, hate' (<Bad.) Ka. *pe:sike, he:sige* 'disgust'. (3630)

481. To. *me:l* 'up, high' (insongs) (l.w): Ta, Ma. Ka. *me:l.* (4173)

482. To. *mi:y-(mi:s-)* 'to graze'; *mi:c-* (*mi:e-*) 'to make to graze': Ta. Ma. Ka. *me:y,* (4179)

483. To. *pe:soxy, pi:so:y* 'hot season' (<Bad.) : Ka. *be:sage, be:saki, be:sige.* (4540)

484. (=926) To. *pe:t* 'hunting' (l.w) :Ta, *ve:ttam, ve:ttai*, Ka. *be:te, be:ntē.* (4547)

485. To. *pe:ku, pe:kīyi* 'it is wanted' (<Bad.): Ka, *be:ku.* (4548)

486. To. *pe:y- (pe:s-)* 'to thatch' : Ta. *ve:y.* (4552)

487. To. *pe:f* 'ambush' (<\*ve:yv); *pe:fiz,-(pe:fij-), pe:fo:k-* (*pe:fo:ky-*), *pe:lz,-(pe:lj-)* '(feline) crouches for [a spring' :Ta. *ve:y* 'to spy out'; *ve:, ve:vū* 'spying, espionage'. (4553)

488. To. *pe:gy* 'stone wall of pen'; *pe:ly* 'fence' (l.w): Ta. Ma. *ve:li* 'fence, hedge, wall', Ka. *be:li,* (4556)

489. To. *pe:dy* 'large basket tied round with cloth'. (3600 Ta. Ma; *petti* 'box' or 3637 Ta. *pe:lai* 'basket', Ma. *pe:la*).

Also cf. the following loans from Indo-Aryan:

- (i) To. *e:ny* 'ladder' : Ta. Ma. Ka. *e:ni* (< Pkt. *seṇi*:-; DBIA 55)
- (ii) To. *ke:ṭ* 'a heavenly body bringing misfortune' : Ta. *ke:ṭṭai* (< Skt. *jyeṣṭha*:-; DBIA III)
- (iii) To. *ke:ly* 'mockery' : Ta. Ma. *ke:li*. Ka. Te. *ge:li* (< Skt *keli*:-; DBIA 113)
- (iv) To. *e:z,a:ṛ* *gīy-* 'to ponder' : Ta. *e:ṣanai* 'desire' (DBIA 57)
- (v) To. *pe:ṭ* 'market town' : Ta. *pe:ṭṭai*, Ka. *pe:ṭe*, (DBIA 276)

11.2.3. \*e: > To. ö: elsewhere.

490. To. *ö:fil*, *e:fil* 'a command, order' < Ta. *e:val* (771)

491. To. *ö:r-* (*ö:ry-*) 'to rise high'; *ö:rc-* (*ö:ṛc-*) 'to make high'; *ö:L-* (*ö:f-*) 'to be fat': < Ta. *e:ru* 'to rise'; *e:l* 'to be excessive' (776)

492. To. *kö:g* 'barking deer': Kod. *ke:mē* Ko. *ke:y* 'wild goat' (?) (1660)

493. To. *kö:r* (*kö:θ-*) 'to lean against (intr.)' tr. *ko:st-* (*kö:sty-*):<sup>v</sup> Ko. *ke:d-*. (1674)

494. To *kö:r* (obl. *köf-*) 'lake, tank formed by dam'; *sö:r* 'mud' (< Ta.): Ta. Ma. *ce:ru* 'mud'; Ka. *kesar*. (1680)-

495. To. *sö:r-* (*sö:d-*) 'to arrive'; *sö:t-* (*sö:ty-*) 'to make to join with others': Ta. Ma. *ce:r*. (2312)

496. To. *nö:ṣf-* (*nö:ṣt-*) 'to measure the length of': Ta. Ma. *ne:r* 'straightness'. (3126)

497. (= 1035) *pō:r* 'name'; *pō:<sup>v</sup>sf-(pō:<sup>v</sup>sī-)* 'to name': Ta. *peyar*  
*pe:r* 'name'. (3612)

498. To. *pō:r* (obl. *pō:f-*) 'cliff': Ko. *pe:r.* (3642)

499. To. *pō:n* 'louse': Ta. *pe:y.* (3643)

500. To. *ō:n* 'the god of the dead' (< Baḍaga): Ko. *pe:n,*  
*pe:nm* 'possession of woman by spirit of dead'. (3635)

501. To. *pō:y* 'Tamilian (i.e. hunter)': Ta. *veṭay* 'hunter'. (4547)

502. To. *pō:d-* (*pō:dy-*) 'to beg': Ta. *ve:n̪u* 'to want'. (4548)  
 See also examples 463, 467, 468 and 604.

### 12.1. Reflexes.

12.1.1. PDr \*o remains as o in all the languages except for the following cases:

- (i) Toda has six correspondences for this, namely, *wa*, *wi*, *i*, *u*, *ü* and *o* (see 12.2);
- (ii) Brahui has three correspondences for this, namely, *o*: *u* and *a* (it has no phoneme short *o*) (see 12.3);
- (iii) *u/o* alternation in South Dravidian and Telugu (Chapter 15)
- (iv) The northern dialects of Gon $\ddot{a}$ i occasionally show *a* for \*o (see 12.4);
- (v) In Manda, \*o as well as \*o: regularly change to *u*, *u*: (K. Zvelebil 1970:64–65; T. Burrow 1976:41)<sup>1</sup>

1 Further examples of \*o, \*o: > Mand, *u*, *u*:

- (i) Mand, *kumu* ‘horn’ : Pe.*komo*. Te.*kommu*. (1759)
- (ii) Mand.*krugdi* ‘fresh, new of leaves’ : Pe.*kroggi*. (1787)
- (iii) Mand. *nuy-* ‘to wash’: Konda. *no $\bar{r}$ -*Pe.*noz-*.(3136)
- (iv) Mand.*puilen* ‘father-in-law’, *pu:day* ‘mother-in-law’ : Pe.*poilen* ‘father-in-law’; *po:da* ‘mother-in-law’. (3685)
- (v) Mand.*ku:di* ‘cow’: Konda Pe.Kuwi *ko:di*.(1823)

For \*o > Ko. e / \*-ay, see Chapter 18.

For \*o > Ka. u / -H.V. see Chapter 19.

Examples:

503. Ta. *on̥tu*, *on̥nu* 'one (neut.)'. Ma. *onnu*. Ko. *oɖ*. To. *wiɖ*. Ka. *ondu*. Kod. *ondi*. Tu. *oñji*. Te. *ondu*. Go.(Tr., A) *undi*; (L) *undi*:. Konda *un̥ti* (*und̥ti*). Kur. *o:n*, *o:nd* 'one whole, one full' Malt. *-ond* 'one (thing)'; *ononti* 'one by one (things)'. Br. *asit* 'one' (1834 d; Pfeiffer (1972:56) says that the long vowel in *Kuṛux* is analogical to the long vowels in the subsequent numerals *e:nd* 'two' and *mu:nd* 'three'.)

504. Ta. *ollu* 'to be possible, situable, consent'; adj. *ol* 'suitable'. Ma. *ellu* 'to consent, love, be fit, possible'; *olla:tta* 'unbecoming; indecent, bad'. Ko. *ola:d* 'bad'; *ola:pm* 'bad return for good action, refusing to keep a bargain', To. *wal-*(neg. only) 'to be bad'; *walo(e)* 'bad'; *üs-(üs)y-* 'to long for'. Ka. *ol,oli,ole* 'to be pleased, like, love'; *olavu,olime,olume* 'pleasure, love'. Tu. *apu-* 'to love, fondle'; *olame,olume* 'affection, love, kindness'; *oli(yu)-* 'to favour, be kind'. Te. *valacu* (neg. gerund *ollaka*) 'to love, wish, desire'; *ollami* 'refusal, rejection'; *valadu, vaddu* is not required or wanted'; *valapu* 'love, desire, wish'. Kui. *or-* (*ɔṛt-*) 'to pine for, lust after'; *ɔṛpa* 'desire, lust'. (846)

505. Ta. *koṭu* (-*pp*-, -*tt*-) 'to give (to 3rd person), bring forth, allow'; *koṭuppu* 'giving'; *koṭai* 'giving away as a gift', *koṭaimai* 'munificence'. Ma. *koṭu* 'to give (to 3rd person); *koṭuppi* 'to cause to give'. Ko. *kor-* (*kot-*) 'to give to 3rd person'. To. *kwir-* (*kwirt-*); *kwar* 'fine levied by assembly'.

(vi) Mand. *hu:nj-* 'to appear'; *tu:c-* 'to show': Pe. *co:nj-* 'to appear'; *co:c-* 'to show'. (2942)

(vii) Mand. *pu:k-* 'to send': Konda Pe. *po:k-*. (3734)

(viii) Mand. *nu:-* 'to hurt, pain'; *nu:mer* 'disease, fever' Pe. *no:-* 'to hurt'; *no:mer* 'fever'. (3143)

Ka.*kodu*, *kuđu* (*kođi-*) ‘to give, allow, emit (as a sound)’; *kođu*, *kođu*, *kođuvike*, *kođuha* ‘giving’; *kođage*, *kođige* ‘gift, grant’; *kođisu*, *kuđisu* ‘to cause to give’. Kod.*kođi-* (*kođip-*, *kođit-*) ‘to give to 3rd person’. Tu.*kor(pi)-*, (B) *kol,-* ‘to give’. ?Kur. *kurpi*: ‘what is given to a servant above his yearly pay’. (1708)

506. Ta.*cɔ̄ti* (-v-, -nt-) ‘to itch, crave meanly; n. itching, scab, herpes, climbing nettle’; *cɔ̄runđu* (*cɔ̄runđi-*) ‘to scratch’; *cɔ̄ri* (-v-, -nt-) ‘to itch; n, itehing’. Ma. *cɔ̄ti* ‘itch, scab, nettles’; *cɔ̄ti* ‘to itch, scratch’; *cɔ̄tuku* ‘to scratch gently’. Ko. *toyr-* (*tɔ̄rc-*) ‘to itch’; *cɔ̄ri* ‘an itch’; *toyr*, *toyrv* ‘*Urtica heterophylla* Dcne. (causes itching and rash)’. To.*twary*. Ka.*turi* ‘itching; scratching, lust’; *turiķe* ‘itching, scratching, stinging’; *turiķe giđa* ‘the Nilgherry nettle’; *turiتا*, *turu* ‘itching’; *turišu* ‘to scratch what itches, scratch’; *turaci*, *turuci*, *turaci*, *turice*, *turuci*, *turuce* ‘*Mucuna pruriens*’. Tu.*tojji* ‘itching’ Te.*durada* Pa. *cod-*(*cott-*) ‘to itch’. Ga.*soy*-‘to itch’; (P) *soymur* ‘the itch’. Gø.*so:h-*, (A) *cohk-*, (Ko.) *oh-* ‘to itch’ Kui.*soha* ‘ring-worm’. (2343)

507. Ta.*tođu* (*tođuv-*, *tođi-*) ‘to touch’; (-pp-, -tt-) ‘to connect, join’; *tođtal*, *tođtu* ‘touching’; *tođakku* (*tođakki-*), *tuđakku* (*tuđakki-*) ‘to catch hold of’; n.‘tying’; *tođai* ‘fastening’; *tođar* (-v-, -nt-), *tuđar* (-v-, -nt-) ‘to follow’. Ma.*tođu* ‘to touch’; *tođtu* ‘concerning’; *tuđa* ‘connexion’; *tuđar*, *tuđal* ‘chain, string’. Ko.*tođ* ‘handle (of pot or basket)’, *torv-*(*torđ-*) ‘to put arms around’. To. *twađ-* (*twađθ-*) ‘to be polluted’; *twađf-* (*twađt-*) ‘to pollute’; *twiřf-* (*twiři-*) ‘to entangle (tr)’; *twiļ* ‘handle of bamboo milking-vessel; *twiřk* ‘hook’. Ka. *tuđu/todu* (*tođi-*) ‘to join’; n. ‘putting on’; *tuđuku*, *tuđiku*, *tuđuňku* ‘to touch’; *tođaku*, *tođaňku* ‘to get entangled’; n. ‘entangling’; *tođu* ‘joining’; *tođi* ‘fight’; *tođar*, *tođru*, *tonđar* ‘to be linked to’; n. ‘connexion’. Kod. *tođ-* (*tođuv-*, *tođi-*) ‘to touch’. Tu. *tođtu* ‘to embrace’; *tođari*, *tođaru* ‘entanglement’. Te. *tođtu-* ‘to touch’;

*toð(u)gu*, *toð(u)vu*, *todo* ‘to put arrow on bow’; *toðaru* ‘to follow’. Pa. *toð-* (*toft-*), ‘to touch’; *toðip-* (*todit-*) ‘to make to touch’; *todo* ‘rope’. Ga.(oll.) *toru*; (S) *torru*. Kur. *torsog-* (*tursgyas*) ‘to touch slightly with the foot’. Malt. *to:r-* ‘to string the bow’. Br. *to:n-* (*to:r-*, *to:-*) ‘to hold, restrain’. (2865)

## 12.2 PDr. \*o > To. wa, wi, i, u, ü, o.

12.2.1. Emeneau (1970:39-41) treated the developments of PDr. \*o in Toda. His statements are modified in the following sections on the basis of a reexamination of the data. The first three reflexes are common while each of the last three occur only in few cases. The following rules, applied in the order given below will account for the first three reflexes.

1. Pre-Toda \**o* > To. *wa* / — { \*Non-nasal alveolar }  
                           \**-ay*  
                           > To. *wi* elsewhere.

2.  $*w > \phi / p -$

12.2.2. Pre-Toda \*o> To *wa*/ — {<sup>\*Non-nasal</sup><sub>\*-ay</sub> alveolar}

See the discussion in 8.2.4.

### Examples:

508. To. *war-* (*warθ-*) 'to break in pieces, as pot (intr.)'; *warf-* (*warf-*) 'id. (tr)': Ta. *uitai* (-v-, -nt-) 'to break as a pot'; (-*pp-*, -*tt-*) 'to break (tr.)'. (799).

509. To. *wṛṣy* 'waterfall'; *wasf-* (*wasṭ-*) 'to defecate (of adults)

510. (=504) To. *wal-* (neg. only) 'to be bad'; *walo*(θ) 'bad': Ta. Ma. *ollu* 'to agree, consent'. (846; Emeneau (1970: 41) hints that in this *wa* < \**o* in forms with thesu ffix-*a*(:) and that this was analogically extended to other forms. This explanation is not necessary because the alveolar but not the following vowel conditions this change).

511. To. *kwala:l* 'Kota smithy' l.w < Ko. *kole:l* 'smithy' (1773)

512. To. *kwaly* 'murder' (l.w.): Ta. *kolai*. (1772)

513. (=790) To. *kwałp* 'fat, in good circumstances' (l.w.) : Ta. Ma. *kołuppu*. (1784)

514. To *kwał-* (*kwałθ-*) 'to feel cold': Ka. *kotə*, *koti* 'to pierce (as cold)'. (1802 & 1544)

515. To. *kwały* 'cat': Ma. *korri* 'female cat'. Ka. *kotti* 'male or female cat'. (1804)

516. To. *twal-* (*twalθ-*) 'to be settled and finished with'; *twalf-* (*twalt-*) 'to settle (debt)'; *twalx-* (*twalxy-*) '(plank) is out of plumb. (coagulant agent is polluted)'; *twalk-* (*twalky-*) 'to make to be out of plumb': Ta. *tolai* 'to become extinct'. Ka. *tolagu*, *tolañgu* 'to go away'. (2900)

Also see examples 506 (this is not an exception as thought by Emeneau 1970:41), 507 and 763. Regarding \*o > wa in To. *twad-* in example 507, Emeneau (1970:40-41.) says: "the past stem *twadθ-* is probably to be compared with Ta. *tołarnt-* and *twad-* is analogical".

In the following cases, pre-Toda \* o > To a / \*p —\*ay; since the sequence pw- is not allowed in Toda, the w is deleted (Rule 2).

51 . (=766) To. *pax* 'smoke, tobacco': Ta. *pukai* Ka. *poge*. (3483)

518. To. *parý* 'roof of hut': Ta. *purai* 'house, dwelling'. Ma. *pura* 'hut'. Kod. *pore* 'thatched roof'. (3523)

519. To. *pa:w* 'river': Ma. *puła*. Ka. *pole*. (3543)

520. To. *pał* 'a load': Ta. *połai* Ka. *pore* (3729)

12.2.3. Pre-To. \**o* > To *wi* elsewhere.

According to Emeneau (1970:40) this development normally takes place before \**i* or \**u* in the next syllable. He, however, noted that all the cases are not covered by this rule; for example, see 521, 527 and 536. Further, it is by now clear that PDr. \**u* (not preceded by a labial) and \**o* merged into pre-To. \**o* before C-*a*; in such cases also pre-To. \**o* develops into To. *wi* (see examples 293–295, 299, 300, 303 and 306). Since it is certain that \**o* > To. *wa* before a non-nasalalveolar consonant or \*-*ay*, we can say that \**o* > To. *wi* in other environments, i.e. before the alveolar nasal, a non-alveolar consonant or a vowel or vowel-consonant sequence other than \*-*ay*. \**o* > To. *i* before *p* can now be accounted for by the rule *w* > *ɸ* / *p-*, which deletes *w* that occurs after *p* (see examples 540–546).

521. To. *wikil* ‘family within clan’ (l. w.): Ta. *okkal* ‘relations, kinsfolk’. Ko. *okl* ‘family’ (782)

522. To. *wik-* (*wiky-*) ‘(bullocks) go round in threshing’ Ka. *okku* (784)

523 To. -*wiṛ* ‘with, after’; *wiṛk* ‘together, undivided’: Ta, *uṭan*, -*oṭu* ‘together with’. Ka. *oḍan*, (798)

524. To. *wiṛy-* (*wiṛs-*) ‘(joints) crack’; (*wiṛc-*) ‘to crack (joints)’: Ta. Ma. *oṭi* ‘to break’. (799)

525. To. *wiṛg-* (*wiṛgy-*) ‘to be crushed’; *wiṛk-* (*wiṛky-*) ‘to crush’: Ta. *oṭukku* ‘to be restrained’; *oṭukku* ‘to subjugate’. (804)

526. Ta *wiṛy* ‘witchcraft practised by Kurumbas’; *wiṛy-* (*wiṛc-*) ‘to bewitch, kill by magic’: Ma. *oṭi* ‘sorcery’. Ko. *orc-* ‘(Kurumba) kills by witchcraft’. (806)

527. To. *witos*<sup>v</sup> ‘help’: Ta. *otta:cai*. (820)

528. (= 503) To. *wid* 'one'; *wid̥y*, *widi*: Ta. *onru*: (834d)

529. To. *winboθ* (*winbo* before nouns) 'nine': Ta. *onpatu*. (862)

530. To. *kwiky* 'crook, hook' : Ta. *kokki*. (1689)

531. To. *kwig* 'the plains south and east of the Nilgiris': Ta. *koñku*, *koñkam* 'the Tamil country comprising the districts of Coimbatore, Salem and a portion of Mysore'. (1692)

532. To. *kwiz*, -(*kwij-*) 'to ridicule'; *kwiz,il* 'ridicule' : Ta. *koñcu* 'to prattle (as children)'; *koñcal* 'childish prattle, amorous talk' (1697)

533. To. *kwift* 'tip, nipple, child's back lock of hair': Ma. *koñtu* 'head of a bone'. Ka. *koñtu* 'point, nipple'. (1704).

534. To. *kwiftk-* (*kwiftky-*) 'to tap on door': Ta. *koñtu* 'to beat'. (1717)

535. (= 605) To. *kwiz*, 'twig' : Ta. *koluntu*. (1787)

536. To. *kwift-* (*kwid-*) 'to carry 'corpse, ' wear (bell)'; *kwify* 'loot' (in songs, l.w. < Ta.): Ta. *kol* 'to receive'; *kolai* 'robbery plunder'. (1788)

537. To. *swift-* (*swify-*) 'to drop (of liquids intr., tr.); *swift* 'a drop' (both l.w. < Ta.): Ta. *coñtu*. (2324)

538. To. *wift* 'empty husk of grain' < *Bađ*): Ka. *poñtu* (3675)

539. To. *wift* 'husk' (<*Bađ*.): Ka. *pollu*, *hollu* 'hollowness' (3726)

In the following cases \**pwi* is reduced to *pi* by Rule 2.

540. To. *pīn* 'gold bangle in dairy; privates of small girl': Ta. *pon*. Ma. Ko. Ka. *pon*. (3732)

541. To. *pīg* 'bubble; *pīg-* (*pīgy-*) '(hand) gets blistered by friction' : Ka. *pugul* (< \**pogul*), *bokke*, *bobbe* 'blister'. (3648)

542. (=975). To. *pig-* (*pīg-*) 'to bubble up, boil over (stomach) swells or heaves with exertion' : Ta. *poñku* 'to boil up, bubble up by heat' (3658)

543. To. *pīt* 'stupidity'; *pītñ* 'fool' : Ma. *poñfan* 'blockhead' (3671)

544. To. *pīy-* (*pīs-*) 'to beat:' Ka. *poy.* (3704)

545. (=799) To. *pīst* 'time, luck': Ta. *polutu*. (3724)

546. To. *pīr-* (*pīt-*) 'to carry'; *pīrf-* (*pīrt-*) 'to endure, be patient' : Ta. *poñu* 'to bear'. (3729)

Note: In the following two cases, Toda shows *i* (or *i:*) for PDr. \**o* after *p-*:

(i) To. *piku*: 'navel' (note Ko. *puku:*): Ta. *pokkuł*, *po:kil*. Ma. *pokkił*, *pokkuł*, *po:tu*, Ka. *pokkuł*, *porkuł*. (3652)

(ii) To. *pi:k-* (*pi:ky-*) 'to lie'; *pi:kü:e:r* 'a lie' : Ta. Ma. *poy.* Ka. *pusi* (< \**posi*). (3702)

#### 12. 2.4 \**o* > To. *ü* (only in five instances)

In most of the instances, there is \**u*/\**o* alternation and it is probable that \**u* is the immediate source for Toda *ü*; see above 8.2.2.

547. To. *üy-* 'to chase': Ta. *oy* 'to drag along'; *uy* 'to carry, take away'. (831)

548. To. *ü̥s-* (*ü̥sy-*) 'to long for': Ta. *ollu* 'to be possible'. (846)

549. To. *tüy-* (*tüs-*) 'to breathe heavily'; *tüy* breathing (esp. hard), breath inside, life': Ta. *tøy*. Ko. *tuy<sup>n</sup>-* '(snake) hisses'. (2894; cf. Ka. *suy* 'to breathe'. (2207)).

550. To. *tüly* 'gate-post of pen with holes for bars; *tüLy-* (*tüLc-*) 'to make hole in stone or tree' < pre-To. \**tułi* : Ta. *tol*, *tolai*, *tułai* 'to perforate'. (2907)

551. To. *mü:s* 'hare': Ta. *muyal, mucal*. Ka. *mola, mala*. (4071)

### 12.2.5. \*o > To. u

This correspondence occurs only in a very few instances. According to Emenau (1970: 41) all of them may be borrowings. Note the presence of a labial after *u* in examples 552, 553 and 557.

552. To. *up-* (*upy-*) 'to be pleased, agree'; *upc-*(*upc-*), *ufc-*(*ufc-*) <sup>v</sup> 'to hand over': Ta. Ka. *oppu* 'to agree'. (781)

553. To. *kub* 'horn blown by Kota musician': Ta. *kompu* 'horn'. Ko. *kob*. Ka. *kombu*. (1759)

554. To. *tu: fo:s* 'entrance of pen': Ta. *to:l(am)* 'cattle-stall', (2905)

555. To. *puθf* 'common property of undivided family' (probably l. w. < Ka.)! Ka. *pudu(vu)* (< \* *potuvu*). (3684)

556. To. *mudy* 'man without use of legs, trunk of body': Ka. *monḍa, monḍu, monḍe* 'blunt, maimed, deficient'. (4199) Cf. also the following:

557. To. *nu:* 'sickness': Ta. *no:y, no:vu*. Ko. *no:v*. (3143; Emeneau (1970:39) says that here To. *u:* is a special development of the sequence *-o:vu*.)

### 12. 2. 6 \*o > To. e

This correspondence occurs only in the following cases. All examples except 558 may be loans.

558. To. *o, os* <sup>v</sup> 'one (adj.)' < \**oru*. (834; *o* remains as it is in *o* probably because it is not followed by anything; *os* is <sup>v</sup> analogical to it).

559. (= 790) To. *kəg iṛ* 'old buffalo'; *kog foly* 'big dairy' at To: *ro:y* 'village'; *kōw* 'fat, stoutness, broadness, 'honeycomb' Ta. *kolu* 'fat' (1784)

560. To. *kosk* <sup>v</sup>'heron' (< \**koriku*): Ta. *kuruku*. Ma. *kuru*. Tu. *korngu*. (1767)

561. To. *tot* 'wax in honeycomb': Ka. *totte* 'a bee's empty cell'. (2874)

562. To. *toz,-mox* 'Toda woman': Ka. *toda*, *todava* 'a Toda'. (2885)

563. (= 799). To. *post* (besides *pist*) <sup>v</sup>'time, luck'; *pot* 'time' *po(i)k* '(at) the time': Ta. *polutu*. (3724; *post* may be due to contamination with Ka. *hotiu*)

12.2.7. A non-nasal alveolar consonant in Toda has influence on the preceding non-high short vowel by way of either preventing it from getting backed or making it non-back (a long vowel is not affected by it). This influence is evident in the case of all the three such vowels, namely, \**e*, \**a* and \**o*. The front vowel \**e*, which otherwise changes into the central vowel *ö* is prevented to do so by the following non-nasal alveolar (10.2.2.). The central vowel \**a*, which otherwise changes to the back vowel *o* is prevented to do so by the non-nasal alveolar (4.2.2.). In both these cases, backing of the concerned vowels is prevented. In the case of the back vowel \**o*, which otherwise remains back (but heightened and unrounded) as *wi*, a non-nasal alveolar that follows makes it to go forward to the central position as *wa* (12.2.2.). In all these developments, the assimilatory influence of the non-nasal alveolar, which is produced in the front part of the hard palate, can be seen. This is a significant general feature of the Toda historical phonology.

Another such generalization that can be made is the assimilatory influence of \*-ay on the central (\*ə, \*ə:) and the mid back (\*o, \*o:) vowels (4.2.; 5.2.; 12.2. and 13.2.). It prevents the former pair from getting backed to o, o: and the latter pair from getting heightened to w̄i, w̄i: and makes it to change to wa, wa:.

### 12.3. \*o > Br. o:, ə, a.

12.3.1. Emeneau (1962:17-18) discussed this problem; the paucity of the material makes it impossible to give any conditioning factors for the different developments. The development here is in part parallel to \*e > Br. i,a (10.4) although there are no instances for \*e > Br. e:;

#### 12.3.2. \*o > Br. o: (four certain instances)

564. Br. *po:G* 'charcoal': Te. *boggu* Kol. *bog*, Pa. *beg(um)*. Ga. *bogge*. (3656)

565. Br. *po:s* 'vulva': Ta. *poccu*. Ma. *pocca*, *pocci*, Ko. *poj*. Ka. *pucci*, *pucce*. (3663)

566. Br. *po:ling* 'stain, stain on one's character': Ta. *pul* 'meanness, baseness'; *polla*: 'bad'. Ka. *pol*, *polla* 'meanness badness'. (3714)

See also example 507.

Cf. also the Brahui future (or non- past) suffix -o:-: Kur. Malt. -o- (future suffix) (see P.S. Subrahmanyam 1971: 306-307)

#### 12.3.3. \*o > Br. u. (three certain and two uncertain instances.)

567. Br. *cuf* 'a drop', *cuff-* 'to drip': Ta. *coffu*, (2324)

568. Br. *curr-* 'to flow, gush': Ta. *co:r*, *cori* 'to flow down' (2353)

569. Br. *putunk* 'bundle, knot': Ta. Ma. *poti* 'a bundle' *pettu* 'to cover'. (3686)

570. Br. *durr-* 'to dare, venture': Ta. *toṭu* 'to begin (tr.)' (2866)

571. Br. *cuG* 'nape of the neck': Ta. *cuval* (< \**coval*). (2221)

#### 12.3.4. \*o > Br. a

There are only two instances.

572. Br. *asit* 'one'; adj. *asi*: < \**ɔŋt-* 'one,' adj. *o:r-/or-V* (834)

573. Br. \**xall-* 'to strike, kill, fire (gun), throw (stone)' < \**kol-* 'to kill'. (1772)

#### 12.4. PDr. \*o > Northern Gondi a/u.

In the northern dialects (Betul, Chindwara, Seoni, Mandla and Chanda) and in the Muria dialect of Gondi, PDr. \*e and \*o change into a (for \*e > a, see examples 347, 348 and 350). In the Mandla dialect in particular but occasionally also in the Adilabad, Yeotmal and the Chanda dialects, PDr. \*o changes into u. Either change does not take place before h; PDr. \*e is also retained before h in the dialect recorded by Trench though not in other northern dialects, cf. (Tr) *keh-* 'to shut': (Ph Ch Mu) *kah-* (1648); (Tr) *veh-* 'to explain': (W Ph) *vah-* (4448). There are a few cases of lengthening of \*o to o: including two before h. The avoidance of \*e and \*o in these dialects, which is comparable to the development in Brahui, seems to be due to the influence of Indo-Aryan (see note 1 on pp. 37-37)

Burrow and Bhattacharya (1960:78) note: "Short e and o have undergone a change to a in the northern dialects and in Muria, though in the case of o, in particular, the change, is by no means universal ... In this respect the western and northern dialects which in certain other features go together are distinctly separated, while Muria, which in other features

has been seen to agree with the south-eastern dialects, in this respect agrees with the dialect of the north'.

Examples for \*o > a.

(i) (Mu) *orpan* 'at one place' : (W) *warpne*, (Ph) *arpa* a:- 'to assemble', (Tr) *arpa*: 'collected together' (< PDr. \*o:r-|\*or-V, 834a).

(ii) (A) *pott-* 'to blaze' : (Tr Ch Mu) *patt-*. (3691).

(iii) (A) *p(h)oro:l* 'name' : (Y) *pharol*, (Tr) *paro:l*, (Ch(D) W) *parol*, (Ph) *parol*, (Mu(E)) *paddir*, *pador*, *padur*, (Mu(W)) *paroi*, *parroi*. (3612)

(iv) (A) *p(h)orro* 'above' : (Tr) *parro:*, (Ch W Ph Mu) *parro*. (3730).

(v) (A) *mollc:l* 'hare' : (Tr) *malo:l*, (Ph) *malol*, *mulol*, (Ch Mu(W)) *malol*, (Mu(E)) *malor*. (4071)

(vi) (A) *son-* 'to go' : (Tr W) *hand-*, (Mu) *han-*, (Ma) *an-*, *han-*. (2286)

Examples for \*o>u.

(i) (A) *kor* 'fowl': (W) *khurr*, (Ph) *kurr*. (1768)

(ii) (A Ch) *tuḍḍi* : 'mouth' : (Ph) *tuḍḍi*, (W) *tuḍḍi*: (CVGD 1527)

(iii) (Tr) *dorr-* 'to be tired' : (Ph) *durr/dorr-*. (CVGD 1895)

(iv) (Ch) *søy* 'porcupine' : (A Y) *suy*, (S) *huy padi*. (2283)

Further examples are in CVGD 886, 953, 1520, 2061, 2126, 2419, 2421, 2977, 2996.

Examples for lengthening are: (Tr) *bo:rs-* 'to roast' (others *pors-*/ *bors-*, CVGD 2421), (Tr) *be:rk-* 'to swell into blisters' (A Ph) *bork-*, CVGD 2652), (Tr) *re:sk-* 'to bale out' (others *rosk-*/ *losk-*, CVGD 3074), (Tr) *so:i:* 'porcupine' (others *soy*/ *hoy*/ *oyyi*, CVGD 3497), cf. also 3493.

For retention of \**o* before *h*, cf. (Tr Ph W Mu) *kohk-* 'to gore' (CVGD 959), (W Ph) *kohka*: 'bhilwa tree' (Tr) *ko:hka:*, (CVGD 960), (Tr WPh) *pohpi*: 'chisel' (CVGD 2432), (Ch) *sah-* 'to itch', (T1) *so:h-*, (CVGD 3499); also 2914, 2429 and 3075.

## \*O:

## 13.1. Reflexes:

13.1.1. PDr \*o: remains as o: in all languages except Toda and Manda. Toda rarely has o: and usually has wa:, wi: or i: (see 13.2). In Manda \*o: always changes to u: as in the case of \*o > u (see note 1. on pp. 137-138)

For \*o: > Ko. e:, see Chapter 18.

## Examples:

574. Ta. o:ta'i 'longer internoded stout reed bamboo, *Ochlandra travancorica*'. Ma. o:ta. Ko. e:y (obs. e:t-), o:y (obl. o:t-) 'sp. *Ochlandra* 'thin bamboo-like plant'. To. wa:y Ka. Kod. o:te. Tu. o:nye. (879).

575. Ta. ko:y 'vessel for taking out toddy'. To. kwa:y (< \*ko:yay) 'bamboo pot used at ti:- dairy'. ? Br. xo: 'cooking-pot'. (1842)

576. Ta. ko:l 'stick, staff, branch, arrow'. Ma. ko:l Ko.ko:l 'stick, story of funeral car'. To. kwi:s 'stick'. Ka. ko:l(u) 'stick, staff, arrow'. Kod. ko:li 'stick'. Tu. ko:li, ko:lu 'stick, staff'. Te. ko:la 'stick, arrow'. Kol. ko:la: 'stick'. Nk. (Ch.) ko:l 'pestle' Pa. ko:l 'staff of arrow'. Go. ko:la:

'arrow, stick' Konda *ko:l* 'big wooden pestle'. Pe. *ko:l* 'pestle'. Mand. *ku:l*. Kuwi *ko:lu*. (1852)

577. Ta. *co:lai* 'flower garden, grove' Ma. *co:la*, Ko. *te:l* 'forest; menstrual blood'. To. *twa:s* 'grove, thicket'. Kur. *ca:la:* 'grove, sacred grove'. Malt. *ca:le* 'grove'. (2357)

578. Ta. *to:n̩a:y* 'wolf'. Ka. *to:la*, Tu *to:li* *to:le*. Te. *tō:de:lu* *tō:delu*. Br. *to:la* 'jackal'. (2926)

579. Ta. *to:l*, *toli* 'skin, hide'. Ma. *to:l*, *toli*; *tukal* 'skin, as of fruit' Ko. *to:l* 'skin' To. *twi:ṣ*. Ka. *to:l(u)*, *togal*, *toval* Ko. *to:li*. Tu. *tugali*, *tolike* 'skin, bark, rind'. Te. *to:lu*, *tokka*, Kol. Nk. Nk (Ch.) Pa. Ga. Go. Konda. Pe. *to:l*, Konda *toko* 'bark, rind'. Kui. *to:du* 'buffalo hide'. Kuwi *to:lu*. (2937)

580. Ta. *pori* (-*pp-*, -*tt-*) 'to hatch'. Ma. *porunnu-* 'to sit on eggs, hatch, brood'; *poruttu* 'hatching'. Tu. *pa:ra*. Pa. *po:r-* '(hen) hatches eggs'. Br. *po:rr-*. (3706).

581. Ta. *mo:tu*, *mo:ṭai*, *mo:lai* 'stupidity'. Ma. *mo:ṭtu* 'obstinacy, perverse pride'; *mo:la* 'stupidity'. Ko. *med* 'dullness of senses'. Ka. *mo:ṭa* 'stupidity'. Te. *mo:tu*, *mo:ṭa* 'rough, rude, dull, stupid'. Br. *mo:ṭ* 'foolish'. (4219)

### 13.2. PDr \*o: > To. *wa:*, *wi:*, *i:*.

13.2.1. The conditionings for the three developments we stated by Emeneau (1970:38-39).

\*o: > To. *wa:* /\*-ay  
      *wi* elsewhere

### 13.2.2. \*o: > To. *wa:* / \*-ay.

582. To. *wa:l* 'writing, education' (l.w): Ta. *o:lai* 'palm leaf' Ka. *o:le*. (903)

583. To. *kwa:t* 'bungalew'. Ta. *ko:tta:i* 'fort, castle', (1831)

584. To. *kwa:y* 'monsoon, year': Ta. *ko:tai* 'west wind, summer'. (1827)

See also examples 574, 575 and 577.

### 13.2.3 \*o: > To. i: / p-

This reflex is identical with *wi:* at the underlying level; there are only four instances for it (cf. \*o > To. *i* / *p-* and Rule 2(p.) in 12.2).

585. (=613). To. *pi:r* 'quarrel, fight'. Ta.Ma.Ka. *po:r*. Te: *po:ru*. (3708)

586. To. *pi:x-(pi:-)*'to go' :Ta. *po(ku)*. Ka. *po:(gu)*. Te. *po:-* (*vu*) (3734; Emeneau (*loc. cit.*) explains the Toda secondary stem *pi:-* as derived from \**po:y-* (found in Ta., Te., Ko<sub>d</sub> and Ko.) with the special development \**o:y* > To. *i*: after *p-*)

587. To. *pi:t* 'flesh, meat; muscle' : Ko.*po:t*. (3749)

588. To. *pi:r* 'hollow of a tree (where bees nest)': Ta. *po:r*. Ko.*bo:r* 'vagina'. Ka. *po:r* 'hole', (3765; Ta. *po:rai* 'hole, hollow in a tree' is not directly related to the Toda word because the latter does not have *r*).

### 13.2.4. \*o: > To. *wi:* elsewhere.

This is the most common development.

589. To. *wi:d-* (*wi:dy-*) 'to run' : Ta. Ma.*o:tu*. Ka. *o:du*. Te: *o:du* 'to be defeated'. (877)

590. To. *wi:y* (*obl. wi:t-*) 'tile, shell, skull' : Ta. Ma. *o:tu* (878)

591. To. *twi:y-(twi:c-)* 'to wash (clothes)': Ta. Ma. *to:y*. (2933)

592. To. *twi:L-* (*twi:t-*) 'to be defeated, become old'; *twi:lc-* (*twi:<sup>v</sup>lc-*) 'to defeat'; *swi:l-* (*swi:t-*) 'to be defeated' (< Bad): Ta.*tosl*, *tor*. (2936).

See also examples 576 and 579.

Note: The following two cases in which \*o:> To.o: is found are most probably later loans.

(i) To. *po:n-* (*po:ny-*) 'to shave, clear': Ka. *bo:jisu*, *bo:lisu* 'to shave (esp. the head)' (3761, Emeneau (*loc. cit.* p.38), however, says that the following \*l is the condition for this special development — this is not convincing.)

(ii) To. *mo:y* 'beard', (l.w. < Ta.): Ta. *mo:ya:y* 'chin, beard'. Te. *mo:vi* 'lip'. (4224)

Also note the development in example 557.

### 13.2.5. The Underlying Patterns in Toda Vowel Changes.

The detailed study of the changes of Proto-Dravidian vowels in Toda (undertaken in the preceding pages) has given us a more precise knowledge than what we had hitherto of the conditioning factors involved. We have also noticed (12.2.7.) some generalizations about the conditioning factors in the case of some of the vowels. In a similar way, we can also observe some general patterns that underlie the changes of the various individual vowels. It is clear that the changes undergone by the individual vowels are not idiosyncratic but they fall into certain patterns (on the other hand, the conditionings that are responsible for the patterned changes are sometimes idiosyncratic). The following are such patterns:

- Front vowels (except the long high one) are changed into non-front (i.e. central or back) unrounded vowels.

\*i > i (except before a palatal or s)

\*e > ö (except before a \*non-nasal alveolar)

\*e: > ö: (except before \*i or \*y)

2. Back vowels (except the long high one) are unrounded.

\*u > i (between a labial and \*-a or before a labial + \*-a)

\*o > wi (except before a \*non-nasal alveolar or \*-ay)

\*o: > wi: (except before \*-ay)

3. Short high vowels interchange their place of articulation retaining their original lip position.

\*i > i (except before a palatal or s)

\*u > ii (before \*i; \*y or \*cc)

4. Non-high vowels are heightened to the immediate next position.

(a) Mid vowels (except the front long one) are heightened.

\*e > i, i (before a \*high vowel, y or a palatal)

\*o > wi (except before a \*non-nasal alveolar or \*-ay)

\*o: > wi: (except before \*-ay)

(b) Low vowels are heightened, backed and rounded (this change must be later in time to the change of \*o(:)).

\*a > o (except before a \*non-nasal alveolar, \*-ay or a single retroflex + \*-a)

\*a: > o: (except before \*-ay)

5. Non-high non-back short vowels (i.e. \*e, \*a) remain unchanged before a \*non-nasal alveolar)

6. Back mid vowels are centralized and lowered.

\*o > wa (before a \*non-nasal alveolar or \*-ay)

\*o: > wa: (before \*-ay)

7. Long high vowels (i.e. \*ii, \*u:) remain unchanged.

### 13.3. Kur *o*:

13. 3. 1. Francis Ekka (1972) made a study of the development of Kur. Malto *o*: He pointed out that the cases that show Kur. Malto *o*: as a development of original \**o*: are very few and that there are many cases in which the former corresponds to other PDr. vowels. Martin Pfeiffer (1972:55-58) showed that Ku<sub>r</sub> *o*: corresponds to the PDr. vowels. \**o*:; \**o*; \**u*:; \**u* and \**a*: Examples:

#### (i) Kur. *o*: < \**o*:

593. Kur. *to:k-* 'to stamp violently with one foot or with both feet' (According to Ekka (1972:24-25) this meaning is wrong and the real meaning is 'to lift the foot or feet relatively high while performing dances'; therefore he suggests that this goes with DED 2777 Ta. *tu:kku* 'to lift up'): Ka. *to:ku* 'to beat, strike', Kui. *to:g-* 'to kick'. (2917)

594. (=605) Kur. *xo:r* 'leaf-bud, fresh and tender leaves of vegetables'; *xo:r-* 'to rhoot out new leaves': 'Go *ko:rs-* 'to sprout'. Kui *ko:ryu* 'new shoot'. Malt. *go:ro* 'infant; India corn when green'; *go:roc-* 'to sprout'. (1787)

595. Kur. *no:γ-* /*nō:γ-* 'to wash', *no:γhor-* /*nō:γhor-* 'to wash oneself': Ta. *nuṭakku* 'to wash'. Pa. *nod-*. (3136)

596. Kur. *o:la* 'resting-place of a wild beast, hiding-place or lair'; *o:lta* *nan-* 'to hide': Ta. *oli-* 'to hide'. Te. *o:lamu* 'a shelter'.(853)

#### (ii) Ku<sub>r</sub>.Malt. *o*: < \**o*

597. Kur. *o:j-* 'to spin, twist', Malt. *o:j-* 'to twist': Ta. *oḷukku* 'to draw out, as gold thread' (851; Ku<sub>r</sub>.-Malt. *o:j-* < \**oḷuc*; the lengthening may be due to the loss of \**l*.)

598. Ku<sub>r</sub>. *xo:l* 'rice-sheaf' (not in DED) < \**koy-Vl*; \**koy-* 'to cut, reap'.(1763)

See also example 503.

(iii) Kur. Malt. *o:* < \**u*.

599. Kur. *mo:x-* ‘to eat (anything except cooked rice)’. Malt. *mo:q-* ‘to eat’: Ta. *mukku, mokku* ‘to eat greedily’; *moci* ‘to eat’. Te. *bokku*. (4212; PDr. \**mo-/mu-*.)

See also example 254.

(iv) Kur. Malt. *o:* < \**u*:

600. Kur. *o:r-, or-* ‘to be warm weather, be heated (e.g. iron, body with fever)’. Malt. *o:rtr-* ‘to make red-hot’: Ta. *uru* ‘to burn, smart’. Ka. *uri*. (565 & 898)

See also example 336.

(iv) Kur. Malt. *o:* < \**a*:

See example 142.

## Quantitative Variation

### **14. 1. Quantitative Variation In Reconstructed Roots.**

14.1. 1. It is well known that in Dravidian there is alternation between a long vowel and the corresponding short vowel and also between a long (or geminated) consonant and the corresponding short (or single) consonant in the initial or root syllable.<sup>1</sup> In cases in which there is such an alternation the

1. The alternation between a long vowel and the corresponding short vowel was first treated in detail by Bh. Krishnamurti in his 1955 paper (and also in his *TVB* §§ 1.288-294). He rejected the earlier theory that this is due to the play of accent and explained that principles of syllabic patterning are responsible for this change. It is greatly interesting to note that T. Burrow has already indicated that the long vowel is original when there is alternation between it and the corresponding short vowel when he said that : "Ka. *ne:lal* 'shade', Ta. *nijal* : Ta. *ni:lal*, Te. *ni:da*. The long *i* in the Tamil and Telugu forms shows the *i* to be original and Ka. *e* secondary." (*Dravidian Studies II (BSOAS X (1940-42), reprinted 1968:27).*

M. B. Emeneau treated the alternation between a double consonant and the corresponding single consonant in the pre-publication form of his 1970 publication (prepared in 1959). In his review (1973) of Kamil Zvelebil's 1970

short vowel or the short consonant occurs before a derivative syllable that begins with a vowel while the corresponding long vowel or consonant occurs in other environments; that is, when no derivative syllable follows or when a derivative syllable beginning with a consonant follows (for example, Te. *cer-ugu* 'to winnow', Ma. *ce:tu*, (example 604); Ta. *a:r* 'to shout', *ar-aṛtu* 'to lament' (601); Ta. *kappu* 'to overspread (as a cloud)', *kav-i* 'to cover' (example 614); Ta. Ka. *muccu* 'to cover' Te. *mus-ugu* 'a cover' (example 622). Since the long vowel or consonant occurs in the unrestricted environment and the corresponding short vowel or consonant in the restricted environment (restricted because a long vowel or consonant does not occur before a derivative syllable that begins with a vowel) the former is considered to be more original than the latter. It must, however, be noted that in a number of cases the variants with the short vowel or consonant occur in many languages that belong to more than one major subgroup and this leads us to conclude that in such cases this shortening has already taken place in the parent language, i.e. Proto-Dravidian itself. It may also be added that even in cases in which the variant with a long vowel or consonant occurs only in one or two languages while the variant with the corresponding short vowel or consonant occurs in a greater number of languages, we have to consider the former variant as more original according to the principle of reconstruction (see examples 605 and 620). In some instances the variant with a short vowel or consonant is found to occur only in one or two languages as against the variant with a long vowel or consonant which occurs in many languages (see example 604 and 618). We have to assume that in such

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book, he has pointed out (p. 80) that : "It was already explicitly stated by Bh. Krishnamurti, *Telugu Verbal Bases*, 81, § 1.191 (and the following paragraphs for examples)" as against Zvelebil who termed it "Emeneau's rule".

cases the tendency to reduce the quantity of the vowel or the consonant was inherited by the language or languages in question from the parent language and it was carried out in individual cases in which a derivative element beginning with a vowel happened to be newly added. It should be noted that quantitative variation does not operate across a morpheme boundary (see Appendix).

The increase in the number of syllables in the base which results from the addition of the extensional element beginning with a vowel is responsible for the reduction of the long vowel or consonant of the root; cf. "The underlying principle of all these alternations is the tendency to preserve the identity of the prosodic quantity in terms of prosodic units (syllables), irrespective whether it concerns consonants or vowels" (Zvelebil 1970:185). (Note that the vowel at the beginning of the extensional element is often lost in languages other than Tamil-Malayaḷam especially if it is followed by a consonant or consonants; see, for example, Ga. (011.) *arg-* (example 601; To. *kirc-*, Ka. *kircu* (603); Pa. *kɔr*, Br. *xarr-* (605). Ka. *talgu*, *targu*, *taggu*, Tu. Te, *taggu* (606); Nk. *kɔrk-*, Pa. *kodk-* (616) and Ko. *tavr-* (618). In such cases we have to assume that the vowel has been lost after bringing about the reduction in the root.)

#### Examples from verbs:

601. (=143) Ta. *a:r* (-*pp-*, -*tt-*) 'to shout, roar, slander'; *araṭṭu* 'to lament, shout with excitement, sound'. Ko. *a:r-(a:t-)* 'to call'. To. *o:sf-* (*o:st-*) 'to dance (of Todas; really to shout while dancing)'. Ka. *a:r* (*ard-*) 'to cry aloud'; *arbisu* 'to cry aloud, roar'. Koḍ. *ara-* (-*nd-*) 'to make loud hoarse noise, moo'. Tu. *a:rkī-* 'to cry aloud, shout'; *arati-* 'to make a grating noise, interrupt'. Te. *a:r(u)cu* 'to cry aloud, shout'

Pa. *a:r-* 'to sound (as bell)'. Ga. (011.) *arg-* 'to bellow'. Kui *a:r-* 'to call', PDr. \**a:r-/ar-V-* (312).

602. Ta. *ka:r* (-*pp*-, -*tt*-) 'to be pungent, saltish or brackish', *kari-* (-*pp*-, -*tt*-) 'to be saltish to the taste, smart (as the eyes from soap or chilli)'; *karakara* (-*pp*-, -*tt*-) 'to feel irritation (in the eyes or throat)'. To. *kary-* (*karc-*) '(nose) tickles'; also nouns— Ta. Ma. *ka:ram* 'pungency, caustic, alkali'. To. *ko:rm* 'curry'. Ka. Tu. *ka:ra* 'pungency'. Te. *ka:ru* 'saltiness'. *ka:ramu* 'pungency'. Konda *karya* 'saltiness, salty'. Pe. Mand. *kariya*. Br. *xaretn* 'bitter'. PDr. \**ka:r-/kar-V-*, (1227)

603. Ta. *kiŋa:yu* 'to cry (as a peacock)' Ko. *kiry-* (*kirc-*) 'to shout'. To. *kiŋc-* (*kirc-*). Ka. *kiŋacu*, *kiŋicu*, *kiŋucu*, *kircu* 'to cry, shout, scream', *ki:ŋu* 'to scream, cry out': Te. *ci:ŋn* 'to call'. Kui. *kih-* 'to shout, cry out'. PDr. \**ki:t-/ki:t-V-*, (1323)

604. Ma. *ce:ŋu* 'to winnow, fan and clean pounded rice'. Ko. *ke:r-* (*ke:ry-*) 'to winnow with up-and-down motion': To. *kō:ŋ-* (*kō:ry-*) 'to winnow'. Ka. *ke:ŋu*. Te. *cerugu*. Kol. Nk. Nk. (Ch.) *ke:d-*. Pa. *ke:d-* (NE) *ke:d:-*. Ga. *ke:y-* Pe. *je:c-* (-*c*-). Kur *kē:s-*, Malt. *ke:s-* 'to sift'. PDr. \**ke:t-* but pre-Telugu \**ker-uk-* (1679)

605. Ta. *koŋuntu* 'tender twig, tender leaf, anything young' *kuŋantai*, *kuŋavi*. 'infant'; *kuŋai* (-*pp*-, -*tt*-). 'to cause to sprout', n. 'tender leaf, sprout'. Ma. *koŋunnu*, *koŋuntu* 'tender twig'. To. *kwiz*, 'twig'. Ka. *koda* 'tenderness'; *kəŋasu* 'young one of wild beasts'. Tu. *kore* 'weak, small'. Te. *kretta* (in cpds. *kro-*) 'new, fresh'; *koŋuku* 'son': *ko:ðalu* 'daughter-in-law' Kol. *kovve* 'young of bird or animal'; *korał* 'daughter-in-law, bride'. Nk. *kovve* 'young of bird or animal'; *korał* 'daughter-

in law'. Nk. (Ch.) *kola* 'bride, son's wife, younger brother's wife'. Pa. *koy* 'very young'; *korung* 'sprout'; *korc-* 'to sprout'; *korol* 'bride'. Ga. (011.) *koral* 'son's wife, younger brothers wife', (S) *kodus-*, *kodc-* 'to sprout'; (P.) *korun* 'young shoot'. Go. *koddi*: 'tender tip or shoot'; *ko:rs-*, *ko:rs-*, *kors-* 'to sprout, grow'; *koria:r*, *ko:rya:r* 'son's wife'. Kon̄da. *koro* 'son,; *koro* (pl.-*k*) 'female child', (pl.-*r*) 'male child'; *korya* 'daughter-in law, younger brother's wife. Pe. *koriya go:r* 'younger brother's wife'; *krogi* 'fresh, new of leaves Manda *krugdi*; *kuriya ga:r* 'son's wife, younger brother's wife'. Kui *ko:ru* 'new shoot, fresh stalk'; *korgi* 'green, unripe'; *kura*, *krua*, *kruha* 'wife'. Kuwi *kuria* 'daughter-in-law'; *kurva* 'younger brother's wife'; *korgi* 'young (of children)'. Kur. *xo:r* 'leaf bud, new leaves'; *xo;r-* 'to shoot out new leaves'. Malt. *qo:ro* 'infant, Indian corn when green'; *xo:roc-* 'to sprout'. Br. *xarr-* 'to sprout'; *xarrun* 'green blue, black and blue, fruitful', *xarruni* 'greenness; wife'. PDr. \**ko:l-*/\**kol-*V- (Go. Kui. and Kur. -Malt. contain evidence for the long vowel; 1787)

606. Ta. *ta:l* (-*v*-, -*nt*-) 'to fall low, be lowered, descend, sink'. Ma. *ta:l*. Ko. *tag-*(*tagy-*) 'to draw back from fight, (ground) is hollowed by thunder bolt' (l.w.<Ka.). To. *to:y-* (*to:s-*) 'to be lowered'; (*toc-*) 'to lower'; *tog-* (*togy-*) 'to be humbled' (l.w.<Ka.). Ka. *ta:l* 'being low, sinking, (inclining'; *ta:gu*, *targu*, *taggu* 'to be low, lowered'. Ko. *ta:r-* (*ta:v-*/ *ta:ruv-*, *ta:nd-*) 'to descend, (sun) sets'. Tu. *ta:ri-* 'to sink in, plunge', *ta:li* 'to fall off'; *taggi-* 'to be humble, incline'. Te. *taggu* 'to decrease'. PDr. \**ta:l-*/\**tal* -V*k*- (2597)

607. Ta. *nanai* (-*v*-, -*nt*-) 'to become wet'; (-*pp*-, *tt*-) 'to wet'; *na:ntu* (*na:nti*-) 'to become wet'. Ma. *nanay-* 'to become wet'; *nane-* 'to wet'; *na:ntu-* 'to become wet'. Ko. *nany-*(*nand*-) 'to become wet'; tr. *nant-* (*natty*-); *na:n-*(*na:nd*-) 'to become

wet in rain'; tr. *na:t-* (*na:ty-*). To. *no:l-* (*no:d-*) 'to get wet in rain'; tr. *no:t-(no:ty-)*. Ka. *nane*, *nene*, *na:n(na:nd-)* 'to get wet'; tr. *na:du*, *na:ndu*, *na:tu*. Kod. *nele-* (*nelev-*, *neland-*) '(person) gets wet'; tr. *nelai-* (*nelati-*). Tu. *nanepu-* 'to be moist'. Te. *na:nu* 'to be soaked'; tr. *na:ncu*. Go. *nand-* 'to be or get wet'; tr. *na:h-*. PDr. \**na:n-*/\**na:nt-*/\**nan-ay*; tr. \**na:!!-*. (3006).

608. Ta. Ma. *nu:tu*, *nuṭukku* 'to crush, pulverize'. Ko. *nuc* 'grains broken in pestling'. To. *nūc*. Ka. *nuṭi*, *nuṭuku*, *nuṭugu* *nuggu* 'to crush, be croshed', Kod. *nuri*, *nucci* 'broken grain of rice'. Tu. *nuriyu-* 'to go to pieces', *nuripu-*, *nurpu-* 'to break', *nukku-* 'to bruise'. Te. *nu:tu* 'to pulverize, grind', *nu:rcu* 'to thresh as corn'; *nu:ṛupu*, *nu:ṛucu* 'to thrash, kill'; *nuṭumu* 'to powder, destroy'; *nuggu* 'powder'; *nu:ka* 'coarse flour'; Konda *nu:ṭ-(-it-)* 'to crush, pulverize' Pe. *nu:z-* (*nu:st-*). Mand. *nu:y-*. Br. *nut* 'flour'. PDr. \**nūt-*/\**nut-*V-. (3089)

609. Ta. *neru-nal*, *neru-nai*, *nennal*, *ne:ṭṭu* 'yesterday'. Ma. *innale:*. Ko. *ne:r* (obl. *ne:ṭ-*). To. *ine:ṭ*. Ka. *ninne*. Kod. *ninna:ndi* Te. *niana*. Go. *ninne:*. Mand. *inelin*. Br. *daro:: dare nan*. 'night before last'. PDr. \**ne:ṭṭi-*/\**net-*V-. (3109; the derivation of the Ka. Kod. Te. Go. forms is: \**neṭṭu-nay*>\**uitu-nay*>\**niṭṭi-nay* > \**ninnay*).

610. Ta. *pāṇi* (-*pp-*, -*tt-*) 'to speak, say, order'. Ma. *pāṇi*, To. *poṇθ-* (*poṇθy-*) 'to talk in assembly'. Tu. *panpu-* 'to say, tell'. Te. *pan(u)cu*, (inscr.) *pancu* 'to send, command'; *panupu*, *pampu* 'order'. Ko. *pank-* (*pan akt-*) 'to send'; *pa:na* 'language'. Kui. *pand-(-i-)* 'to send, commission'. Br. *pāṇ-* (*pāi-*, *pa:r-*) 'to say, speak, tell'. PDr. \**pa:n-*/\**pan-*V-. (3212)

611. Ta. *para* (-*pp-*, *nt-*) 'to spread, be broid (as a plane surface)' *parakku* (*parakki-*) 'to roam about'; *parambu* (*parambi-*) 'to spread (intr.)', tr. *parappu* (*parappi-*); *pa:r*

'expanse, earth'; *pa:ram*, *pa:ri* 'earth'. Ma. *para* 'to spread'; *paranna* 'broad'; *parampu* 'bamboo mat'; *parava* 'sea'; *pa:r* 'the earth, world'. Ko. *pard-* (*pardy-*) '(small objects) spread over large [space]'; *part-* (*party-*) 'to spread in sun to dry'. To. *par me:η* 'tree with huge trunk'. Ka. *pare*, *parađu*, *parapu*, *parvu*, *parbu*, *pabbu* 'to spread'. Kod. *parat-* (*parati-*) 'to spread grain'; *para-* (*parap-*, *parand-*) '(to crawl'. Tu. *parapu-*, *parađi-*, *parambu-*, *parbu-* 'to spread' Te. *parāgu*, *paṭāgu*, *parvu* 'to spread (intr.)'; tr. *paracu*, *paṭācu* *paṭāpu*; *pa:tu* 'to spread, extend'. *pa:ru* 'to creep, crawl'. Pa. *parp-* (*part-*) 'to spread'. Kui. *pra:h-* 'to spread out (tr.)'; *bra:đ-* 'to be spread (news)'. PDr. \**pa:r-* / \**par -V-*. (3255)

612. Ta. *pa:tu* (*pa:ti-*) 'to run'; *patra* (-*pp-*, -*nt-*) 'to fly, hasten'; *pati* (-*v-*, -*nt-*) 'to run away'. Ma. *pa:tu*, *patra* 'to fly'. Ko. *parn-* (*parnd-*). To. *po:ti-* (*po:ty-*). Ka. *pa:t* (*pa:rd-*), *pa:tu* (*pa:ti-*); *pati*, *patu* 'flying, running'. Kod. *pa:ri-* (*pa:ri-*) 'to fly'. Tu. *pa:ri-*. Te. *pa:tu*, *paṭacu* 'to run, fly'; *paṭugu* 'running'. Kui. *pa:sk-* 'to fly'. PDr. \**pa:t-* / \**pat -V-*. (3311)

613. Ta. *poru* (-*v-*, -*t-*), *porutu* (*poruti-*) 'to fight'; *po:r* 'battle, war, rivalry'; *po:ri* 'rival'. Ma. *poru*, *porutu* 'to fight'; *po:r* 'battle'. Ko. *po:r*. To. *pi:r*. Ka. *po:r* 'to fight', n. 'fight, quarrel'. Tu. *po:riyu-* 'to wrestle, quarrel', *pordu* 'battle'; *porumbu-* 'to wrestle, strive'. Te. *po:ru* 'to fight', n. 'fight'. Ga. (Oll.) *porup-* (*porut-*) 'to become angry', (S) *po:r-* 'to abuse, scold' Kui. *proh-* 'to rebuke, fight', PDr. \**po:r-* / \**por -V-*. (3708).

614. Ta. *kappu* (*kappi-*) 'to overspread (as a cloud)'; *kavi* (-*v-*, -*nt-*) 'to cover, overspread, surround; (-*pp-*, -*tt-*) 'to cover (as with an umbrella), overshade'; *kammu* (*kammi-*) 'to be overcast, cloudy', Ma. *kappu*, *kammu* 'to cover, overspread', *kavi* 'to overflow, inundate, surpass'; *kami* to,

overspread.' Ko. *kavc-* (*kavc-*) 'to cover with a garment'. To. *kofc-* (*kofc-*) 'to be in great numbers, (crowd) comes in great numbers'; *kofy-* (*kofs-*) 'to surround'; *kofc-* (*kofc-*) 'to cover'. Ka. *kappu* 'to cover, surround'; *kavi* 'to cover, overspread, attack'. Tu. *kabi-* 'to surround, overspread (as clouds)' Te. *kappu* 'to cover, overspread'; *kaviyu* 'to spread, approach, attack'; *kammu* 'to cover, overspread'. Pa. *kapp-*. Konda *kap-(t-)* '(clouds) to overcast the sky'. Kur. *khap-* 'to cover exactly, fit upon hermetically, stick fast to or together'. PDr. \**kapp-/kap-i* (also \**kamm-*). (1024).

615. Ta. *killu* (*killi-*) 'to dig out, scoop'; *kilai* (-*pp-*, -*tt-*) 'to dig up, stir, scratch up (as fowls), root up (as pigs), excavate'; (-*v-*, -*nt-*) 'to pry out' (as a 'thorn from the flesh with a needle'); *kilaru* (*kilari-*) 'to poke, stir'. Ma. *kiłe* 'to dig up'; *kiła* 'digging, dug place'. To. *kiLy-* (*kiLc-*) 'to ladle out (food)'. Kođ. *kała*- (*kałap-* *kałat-*) 'to dig'. Tu. *kileki-* 'to stir, irritate, provoke'. Te. *keläku* 'to stir, mix'. PDr. \**kill-*/\**kil-V-*. (1321)

616. Ta. *koṭtu* (*koṭti-*) 'to sting (as a scorpion. wasp)'; n. 'stinging'; *koṭukku* 'sting of a wasp, hornet, scorpion, claws of a crab, lobster'. Ma. *koṭtu* 'to sting (of scorpion)'; *koṭukka* 'scorpion's sting'. Ko. *koṭk-* (*koṭky-*) '(snake) strikes, bites'. Ka. *kuḍuku* 'to sting (as a scorpion); *kuḍuku*, *kukku* 'to peck'. Tu. *kodapu-* (*kodat-*) 'to bite (as a serpent), peck, strike with the beak'. Nk. *koṛk-* 'to peck'. Pa. *koḍk-*, *koṭṭ-*. Ga. (Oll.) *koṭ-*; (S) *koṭ-* 'to bite (as snake)'. Go. *koṭṭ-* 'to peck'. Pe. *koṭ-(t-)* '(snake) to bite'. Mand. *kuṭ-*, Malt. *kod-* 'to dig out, eradicate'; *kodkare* 'woodpecker'. PDr. \**koṭṭ-/koṭ-V-*. (1718).

617. Ta. Ma. Ka. Tu. Te. *uppu* 'salt'; Ko. To. *up*. Kođ. *uppi*. Kol. Nk. (Ch.) *sup*. Nk. *cupp*. Pa. *cup*. Ga. (Oll.) *sup*,

(S) *cuppu* — Ta. *uvar* (-*pp*-, -*tt*-) ‘to taste saltish, dislike’, n. ‘saltishness’. Ma. *uvar* ‘salt taste’; *o:r* ‘saltiness’. Ka. *ogar* ‘an astringent taste’. Tu. *ubari*, *uba:ri*, *ugari*, *ogari* ‘brackishness’; *ogari-* ‘to be come salty or brackish’. Te. *ogaru*, *vagaru* ‘astrin-gent taste’. Go. (Tr.) *sawwor*, (A) *sovvo:r*, *hovo:r*, (Koya) *ovo:r*, ‘salt’. Konda *so:ru*, Pe. *ho:r*. Mand. *ja:r-*. Kui. *sa:ru*. Kuwi *ha:ru*. PDr. \**cupp*/\**cup-ar*. (2201)

618. Ta. *tappu* (*tappi-*), *tavaru* (*tavar̥i-*) ‘to err, mistake, escape’ n. ‘mistake’. Ma. Ka. Tu. Te. *tappu*. Ko. *tap-* (*tapy-*), *tavr-* (*tavry-*) ‘to make mistake’, *tap* ‘mistake, a fine’. To. *top-* (*topy-*) ‘to postpone, fail to come’; *top* ‘sin’ (in ‘song’). Kod. *tapp-* (*tappi-*) ‘to escape’; *tappi* ‘a mistake’. Konda *tap-* (-*t*-) ‘to miss or fail’. Kui. *dapa* ‘lie; false’. PDr. \**tapp-* (in Ta. and Ko also \**tap-at-*). (2498).

619. Ta. *terru* (*terri-*) ‘to stumble, mistake, stammer’; n. ‘tripping, mistake, wrong’. Ma. *terru* ‘to slip, stumble, mistake’, n. ‘slip, stumble, mistake’. Kod. *teri-* (*terip-*, *teric-*) ‘to totter about (as a child or through weakness)’. PSDr. \**teri*;-; pre-Kod. \**ter-i*- (2836).

620. Ta. *naku* (*nakuv-*, *nakk-*) ‘to laugh, smile’; *nakkal*, *nakal*, *naka:al*, *nakai* ‘laughter, smile’; *naka:ar* ‘tooth, as appearing in laughter’; *nakai* (-*pp*-, -*tt*-) ‘to laugh, smile’. Ma. *nake*. Ka. *nagu* (*nakk-*), *nage* ‘to laugh, smile’, n. ‘laugh’ smile’ Tu. *nakali* ‘idicule’; *nakeri-* ‘to titter, giggle’. Te. *nagu*, *navvu* ‘to laugh’; n. ‘laugh, smile’. Pa. *nav-* ‘to laugh’. Ga. (Oll.) *nag-*, (S) *nagg-*. PDr. \**nakk-/nak-V-*. (2944).

621. Ta. *pukai* (-*v*-, -*nt*-) ‘to burn as the heart, grieve’; n. ‘distress’. Tu. *bugulu-* ‘to be grieved’. Te. *pokku*, *pogulu*, *povulu* ‘to be sorrowful’. PDr. \**pokk-/\*pok-V-*. (3649)

622. Ta. *muccu* (*mucci-*) ‘to cover’. Ko. *muc-*(*muc-*) ‘to cover’; *mucaŋ* ‘tight-fitting cover’. To. *mūc-*(*mūc*) ‘to cover’; *mūcxu:* ‘iid, cover’. Ka. *muccu* ‘to close’; n. ‘shutting’; *muccalu*

'closing, covering'; *muccala*, *muccu*, *mucce* 'cover, lid'. Kod. *mucc-* (*mucci-*) 'to close'; *mucci*, 'lid, cover'. Tu. *muccu* 'to shut, close', *mucca*, *muccala* *mucci* *muccu* 'lid of vessel'; *mucc aŋtē* 'a close mouthpiece' *muccige* 'lid, cover, ceiling' Te. *mu:yu* 'to cover, shut'; *mū:ta* 'lid'; *musūgu* 'cover, vell'. Nk. *mus-* 'to cover'. Nk. (Ch) *muc-*. Pa. *muy-*; *mucca* 'shell-covering of the snail'. Ga. (Oll.) *muy-* 'to cover'; (S) *mu:y-*. Go. *mucc-*; *mucci*: 'a cover'. Konda *mus-(-t-)* 'to bury, cover, close'. Pe. Mand *muc-*-. Kui. *mus-*. (K)*mucc-*. Kuwi *mucc-*; (Su.) *muh-* (*must-*), Kur. *mucc-* 'to close door or lid, shut' *musug-* 'to envelop, wrap in, pack into a bundle'. Malt. *muc-* 'to close or shut up'; *musg-* 'to pack up, tie into a bundle';/ *musgr-* 'to be closed'. Br. *must* 'shut, closed'. PDr. \**mucc-*\**muc-V-*. (4025).

623. Ta. *vartu* (*varti-*) 'to grow dry: evaporate', n. 'drying up'; *vartal* 'dried vegetable'; *vata* (-*pp-*, -*ni-*) 'to dry up'; *vatal* 'drying up'; *varam*, *vataŋ* 'drought'; *vatal* (*varałv-*, *vataŋt-*) 'to become dry'; n. 'drying up'; *vatu* (-*v-*, -*nt-*) 'to be parched'; (-*pp-*, -*tt-*) 'to dry (tr.)' 'parch'. Ma. *varttu*, *vatal* 'to grow dry'; *vatu* 'to parch'. Ko. *varv-* (*vart-*) '(tissues) become dry with fever'; *varl* 'dry (meat)'; *vat-*(*vaty-*) '(liquid) dries up'. To, *parL-* (*parł-*) '(tree) dries up, dies'; *parn* 'drought' Ka. *bare* (*bařat-*) 'to grow dry'; *battu*, *baccu* 'to dry up'; *battalu* 'dried vegetable or fruit'. Kod. *batt-* (*batti-*) 'to go dry'. Tu. *baranji-*, *bacci-*, *batti-*; *baceli*, *batteli* 'leanness, fatigue'. Te *vapu* 'drought'; *vattu* 'to be dried up', 'arugu' 'vegetables or fruit preserved in a dry state.' Kol. *vat-**vatt-*) 'to parch (grain)'. Pa. *vett-*, (NE) *vetti-* 'to wither'. Ga. *vatt-* Go. *vatt-*. Konda *vaR-(-t-)* 'to dry (in the sun), get dried'; *va:ł-(-t-)* 'to fade or wither (as flowers in the sun)'. Pe. *vac-(-e-)* 'to dry up, whither'. Mand *vac-*. Ku. (*vas-* (*vasi-*)). Kuwi *va:y-(-it-)*. Kur. *batt-*. Malt. *bat-*. Br. *ba:rr-*, *ba:rring-* 'to become dry, parched, ripen (of corn)

wither'; *ba:run* 'dry, ripe, unfertile, barren'. PDr. \**vatt-*/ \**va:fi-*/ \**va:f-V-*. (4355a).

624. Ta. *vittu* (*vitti-*). *viccu* (*vicci-*) 'to sow, spread, broadcast'; *vittu* 'seed, semen'; *viccu* 'seed'; *vitai* (-*pp-*, -*tt-*) 'to sow seed, publish, deliver, throw'; n. 'seed, testicle' Ma. *vittu* 'seed, semen'; *vite* 'to sow seed'; *vita* 'sowing; sowing season, grain sown'; *vitar* 'seed'. Ko. *vit-* (*vity-*) 'to sow'; *vit* 'seed'; *vitan* 'time of sowing'. To. *pit* (*pity-*) 'to sow'; *pit* 'seed'. Ka. *bittu* 'to sow'; *bittu*, *bitta*, *biltu* 'seed'; *bittige* 'act of sowing'; *bede* 'seed, sowing' Kod. *bitt-* (*bitti-*) 'to sow, scatter'; *bitti* 'seed selected for sowing'. Tu. *bitti-*, *buttu-* 'to sow seed'; *bitti* 'seed, testicles'; *bittige*. *bitte* 'sowing'; *bide* 'a particular sort of seed'; *butte* 'semen virile'. Te. *vittu* 'to sow'; n. 'seed, testicle', *vittanamu* 'seed, testicle'; *veda* 'sowing' Kol. Nk. Pa. *vit-* 'to sow' Pa. *vittid* (pl. *vittil*) 'seed, semen' Ga. (Oll.) *vit-* 'to sow'; (S) *vi:t-*; *vi:ti* 'seed' Go. *vi:t-* 'to sow'. Konda *vitu* 'seed'. Pe Mand. *vi:t-* (-*t-*) 'to sow'. Ku. *vitka:* 'semen'. PDr. \**vitt-*/ \**vi:ti-*/ \**vit-V-*. (4428).

14.1.2. Before proceeding further, we have to note that Zvelebil adds a third "rule" to the above two in his 1967 article and also in his 1970 book (pp.184-7). It has to do with alternation between a base with a long vowel followed by a single consonant : (C<sub>1</sub>)  $\bar{V}$ : C<sub>2</sub>, and a base with the corresponding short vowel followed by the corresponding double consonant : (C<sub>1</sub>) V<sub>1</sub> C<sub>2</sub> C<sub>2</sub>. Zvelebil (1967: 90-1) himself has noted that "... this fundamental rule is not a derivational rule; in derivation, it is often not valid at all, on the contrary, the quantity is preserved ... It explains the alternation of etymologically related items, NOT derived directly one from the other." It is important to note that unlike the above two processes the process involved in this has no conditioning factors and is not widespread at all but is extremely

restricted to a small number of instances. We are therefore constrained to conclude that there is least justification to call this a "rule"; the term is applied properly only to such processes which operate regularly under specific conditions with few or marginal exceptions. Zvelebil is not justified in calling this a regular alternation" (1970:185) and then wondering why it does not operate in words like \**ka:t̪tu* 'wind',, \**pa:t̪tu* 'song', \**ya:t̪r-* (oblique base of \**ya:t̪ru* 'river') (*ibid* p.187). It must be noted that such words belong to a very common phonological pattern. It is preferable to call this process rather a "tendency" or "sporadic alternation" which shows up in a few instances. It is similar to such sporadic changes in Dravidian as the loss of an initial \**n-* (30.2.) or the change of an initial \**c-* to *t-* in languages other than Toda (23.1.2). The harm done by giving this process the status of a rule is already apparent in G. Sambasiva Rao's 1973 article in which he not only talks about "exceptions" to this rule but also attempts in one instance (*ibid.*, p. 241) i.e., in the case of Ta *ka:t̪tu* 'wind', to reject the straight forward and obvious etymological connection of it with *ka:l* 'wind' and seeks to derive it from either Ta. *ka:l* 'to flow (as saliva from mouth)' (1237) or with Ma. *ka:l* 'to vomit' (1236) which is not at all convincing. The following is the more or less complete list of instances for the operation of this process.

- 625. Ka. *a:te, a:de* 'leech' (89)
- 626. Pa. Go. *ucc-* 'to spit', Kol. Nk. *u:s-* (495)
- 627. Ta. *e:vu, evvu* 'to discharge' (691)
- 628. Kol. Nk. *kucce* 'coocked vegetable'. Pa. *kucce*, Kui *ku:sa* 'greens'. (1467)
- 629. Ka. *cikka* small' *ci:ku* 'smallness' (2057)
- 630. Ta. *cuttu* 'to point out', Ma. *cu:ntu*, Kui *su:t̪-* (2187)

631. Ta. *curre* 'to revolve', *cu:ru* 'to surround' (2238)

632. Ta. *ta:vu*, *tavvu* 'to jump, leap' (2596)

633. Ta. Ma. *tuppu* 'to spit', Ka. *tu:pu* (2725)

634. Ta. *tu:tal* 'small earthen pot', Tc. *dutta* (2785)

635. Ka. Tu. *dodda* 'big', Pa. *do:ra* (2875)

636. Ka. *to:ve*, *tovve*. *tove* 'a dish prepared of boiled split pulse' (2938)

637. SDr. *nakku* 'to lick', CDr. *na:k- < \*na:kk-*; (2945)<sup>2</sup>

638. Ta. *evvam* 'affliction', *e:val* 'poverty' (3094)

639. Ta. *no:vu*, *novvu*, *novval* 'pain', Te. *no:vu*, *novvu* (3143)

640. Nk<sub>2</sub> *bakka* 'gum', Pa. *ba:k(ar)*. (3159)

641. Ta. *paccai*, *pa:cu* 'greenness', *pa:cai*, *pa:cam* 'moss' (3161)

642. Te. *pittu* 'to break wind', Konda, Pe., Mand., Kui. Kur. Malt. *pi:t-*. (3428; cf. 3455 Ta. *pi:* 'excrement').

643. Kuvi (F) *bu:ga*. (S) *bugga* 'cheek'. (3485)

644. Te. *pu:(vu)*, *puvvu* 'flower'. (3564)

645. Ma. *pe:nu*, *pennu* 'to take care of'. (3633)

646. Ma. *pottu* 'hole in the ground', *po:tu* 'a hole as in worm eaten wood'. (3646)

647. Ta. *pokkul*, *po:kil* 'navel': (3652)

<sup>2</sup> This entry is related to 3009 Ta. *na:*, *na:kku*, *na:vu* 'tongue'. Although it involves irregular alternation of long and short vowels, it does not come under this process because there is no variant with original single *\*k*; so also the examples 630, 633, 642, 648 and 656. These illustrate the type of alternation (C) VCC-~ (C) VCC-.

648. Ta. *pottu* 'chaff', Kui *bo:ti* 'chaff of millet'. (3675)

649. Ta. *maccu* 'blemish', *maccam* 'mole on the skin', *ma:cu* 'spot'. (3783&3927)

650. Kođ. *muccē* 'langur', Kui *mu:su* 'sp. monkey'. (4020)

651. Ta. (and many other languages) *muccu*, *"mu:y* (< \**mu:c-*) 'to cover'. (4025)

652. Ta. *mu:tu* 'to hinder', Go. *mu:ṛ-* 'to be blocked'. (4042)

653. Ta. *mettu* 'mound', *me:tu* 'height, hillock'. (4151)

654. Ta. *mottu* 'to strike', *mo:tu* 'to hit'. (4201)

655. Ta. *mo:tu*, *mot̪ai* 'stupidity'. (4219)

656. (= 624) Ta. *vittu* 'to sow', Go. *vi:t-*. (4428)

14.1.3. Since the operation of the alternation that was mentioned at the beginning of this chapter has been discussed in earlier writings mainly with reference to verb bases, we shall discuss here its operation in the other categories, that is, mainly nouns and also pronouns, numerals and adjectives. As we shall see later, this will give us a better idea of the conditioning factors for this alternation in the various categories.

The conditioning factor for the occurrence of the variant with a short vowel or consonant, that is, "when followed by derivative suffix (or syllable) that begins with a vowel" works well in the case of verb bases.

In pronouns, however, a long vowel is reduced to the corresponding short vowel before a suffix beginning with a vowel, whether it is derivational or inflectional: \**ya:ṛ* 'I' (: oblique base \**yāṛ-*, which is followed by case suffixes that begin with a vowel, 4234); \**ya:m* 'we (excl.)' (: oblique base \**yām-*, 4231); \**na:m* 'we (incl.)' (: oblique base \**nam-*,

3019); \**ni:(ŋ)* 'you (sg.)' (: oblique base \**nin-*, 3051); \**ni:m*; \**ni:r* 'you (pl.)' (: oblique base \**nim-*, 3055); \**tati-*'3rd person Reflexive sg. pronoun' (: oblique base \**tan-*, also *tan-i* 'singleness' vb. 'to be alone', 2612) and \**ta:m* '3rd person Reflexive pl. pronoun' (: oblique base \**tam-*, also *tam-ar* 'one's own people', *tam-i* 'solitude', vb. 'to be alone', 2:82).

A long vowel in the root of a numeral is reduced to the corresponding short vowel when it is followed by a vowel in the next syllable. The variant with the short vowel followed by *u* in the next syllable often occurs as an adjective before a word that begins with a consonant; in numeral compounds that express multiples, the second word will be the numeral 'ten' or 'hundred'. The following are the examples,

*o:r/or-u* adj. of \**on!* 'one' (Ta. *o:r a:ŋ* 'one cow', *oru na:ɻ* 'one day'; note that in Old literature *o:r* occurs also before a consonant and *oru* before a vowel: *o:r te:r* 'one chariot', *o:r col* 'one word', *or(u) a:ɻu* 'one way' 834a).

*i:r/ir-u* 'adj. of \**ir-an!* 'two' (Ta. *i:r aɻivu* 'two kinds of knowledge', *iru maruntu* 'two medicines', *iru-patu iru-vatu* 'twenty', *iru-var* 'two persons; 401).

*mu:v-* (before a vowel: the is *v* a glide) /*mu:-* (before *v*)/ *mu-* (before a doubled consonant) 'adj. of: \**mu:n!* 'three' (Ta. (*mu:-v-eyil* 'three forts', *mu: ve:ntar* 'three kings', *mu-kkan* 'three eyes', *mu-ppatu* 'thirty', 4417).<sup>3</sup>

\**na:l* 'four' (3024) has the variant \**nal-u* in Toda *nal poθ* 'forty', Ka. *nalvattu* 'id.' (< \**nalu-pattu*). Te. *nalu-vadi* 'id.'. *nan-nu:ɻu* '400' (< \**nalu-nu:ɻu*), *nalu-vuru* 'four

<sup>3</sup> Ka. *mu:vattu* and Ta. *muppatu* 'thirty' suggest that the original form is \**mu:patt*. The shortening in *mu-* is an irregularity and it does not confirm to the general rule.

persons' *nalu desalu* 'four directions', etc. and in Pa. *nel cic* 'four days', etc.

\**ca:t* 'six' (2051) has the variant \**cat-u* which is used as an adjective in many languages (mainly in numeral compounds expressing multiples: Ta. *aṭu-patu* 'sixty', *aṭu-var* 'six persons' *aṭu cuvai* 'six tastes', etc.; (cf. Kui *saj* 'six', *sajgi* 'six things').

\**e:l/\*el-u* 'seven' (772): Ta. *e:l col* 'seven words', *e:l u:r* 'seven villages', *elu muṭi* 'seven crowns', *elu-patu* 'seventy', *elu-var* 'seven persons'.

Also note that in \**patt* 'ten' (3236), the *tt* is reduced to *t* before *-iŋ* in Ta. *pat-iŋ-oŋtu* '11', etc. and also when it occurs as the second member in numeral compounds like Ta. *iru-patu* 'twenty', etc.; Te. *pad-i* 'ten' is originally from \**pat-iŋ*.

The following adjectives in Tamil show alternation between a variant with a long vowel or consonant (which normally occurs before a vowel) and a variant with the corresponding short vowel or consonant (which occurs before a consonant). In a few of these, such a variation is found to exist in other languages also.

*a:r-/ar-um/* 'rare' (184) : *a:r-uyir* 'rare life'. *arum cevvi* 'rare time', *aru viṇai* 'rare action'.

*ka:r-/kar-um* 'black' (1073 a) : *ka:r-a:ŋ* female buffalo.,

*ka:r me:kam* 'black cloud', *karum palakai* 'black-board,

*c:i:r-(also ciṭṭ-)/ciṭṭ-u* 'small' (1326): Ta. *c:i:r-aṭi* 'small foot' *ciṭṭ-uyir* 'small life' (cf. Te. *ciṭṭ-adavi* 'small forest'), *ciṭṭu kai* 'small hand',

*kə:l-/kol-um* 'fatty' (1784) : *kə:l-u:ŋ* 'fatty meat' ,*kolun-koti* 'thick creeper',

*ce:y-/cem-* ‘red’ (1607) : *ce:y-aṭi* ‘red foot’, *cen-ta:marai* ‘red lotus’.

*na:ṛ-/naṛ-u* ‘fragrant’ (2379): *na:ṛ-ital* ‘fragrant leaf’, *naṛu nutal* ‘fragrant forehead’.

*pa:c-/pac-um* ‘green’ (3161): *pa:c-aṭai* ‘green leaf; pacuṇ ka:y ‘green (unripe) fruit’.

*pe:r-/per-um* ‘great’ (3613): *pe:r-avai* ‘great assembly (cf. Ka. *pe:r-aḍi* ‘big foot’, Te. *pe:r-o:lagamu* ‘great assembly’), *perum puli* ‘tiger’.

*mu:t-/mut-u* ‘old, ancient’(4057): *mu:t-aṭiñay* ‘great scholar’, *mutu nīr* ‘sea (lit., ancient water)’.

*kurṭ-/kurṭ-um* ‘short’(1537) : *kurṭ-uyir* ‘small life’ (cf. Te. *ku-usuru* ‘id.’), *kurṭun-tokai* ‘small collection’.

*matt-/maṛu* ‘another’ (3903): *matt-oru* ‘another’, *maṛu na:l* ‘next day’,

*vetṭ-/ veṭṭ-um* ‘empty’ (4538) : *vetṭ-ar* ‘worthless persons’, *veṭṭuṅku:ṭai* ‘empty basket’

14. 1.4. When we consider nouns, we at once note that there is a large number of them with phonological structures that are incompatible with the rule that has been mentioned above. For example, nouns like *\*ko:ṭay* ‘southwest monsoon’ (1827), *\*co:lay* ‘grove’ (2357). *\*ku:ṭay* ‘basket’ (1564), *\*va:ṭay* ‘banana’ (4403), *\*ko:li* ‘fowl’ (1862), *\*pa:nay* ‘pot’ (3394), *\*ka:kkay* ‘crow’ (1197), *\*ta:nṭi* ‘Belleric myrobalan’ (2614) and hundreds of others that are similar to these show a long vowel in the root although it is followed by a vowel. Similarly, there are numerous nouns like *\*kuppay* ‘heap’ (1440), *\*muṭṭay*/*\*moṭṭay* ‘egg’ (4048) *\*petṭi* ‘box’ (3600), *\*paḷḷam* ‘low land’ (3307), *\*piḷḷay* ‘child’ (3449), *\*kalḷan* ‘thief’ (1156), *\*neṭṭi* ‘forehead’ (3128), *\*iṭṭi* ‘meat’, (450) and *\*maññay* ‘peacock’ (3793) which

contain double consonants before a vowel. (The derivatives of the reconstructed words that are cited above occur in many languages which belong to more than one subgroup and it is therefore certain that they belong to Proto-Dravidian.)

14. 1.5. There are two ways to explain this discrepancy. The first one is to say that in most of these words what follows the initial (C)VC - or (C) VCC- is not a derivative suffix; in other words, such words must be taken as single units without cutting them into "root" and "derivative suffix". This explanation, however, is not satisfactory for the following reasons. Firstly, even in verb bases the division into root and derivative suffix is made on etymological and structural grounds rather than on grounds of semantics. In both nouns and verbs, the so-called "derivative suffixes" (or "particles of specialisation" according to Caldwell) do not convey any meaning as rightly observed by Bh. Krishnamurti (1961:141-2).<sup>4</sup> Considering the *i* or *ay* in the verbs *tiri* 'to turn' and *nīyay* 'to think' 'as a derivative suffix. is no more justified than

<sup>4</sup> Therefore it is not entirely correct to call them "suffixes"; the term "extensional element" seems to be a better one. In this connection, it is significant that M.B. Emeneau (1970: 31-33) used the term "derivative (syllable)" rather than "derivative suffix" in his discussion on the distribution of high and middle vowels although "derivative suffix" is also used by him on p. 28.

Krishnamurti (1961:142), however, observes that : "...NP and PP suffixes are semi-grammatical. Certain cases of alternation of NP or B (i.e., voiced P) with PP or P are tied up with a change in the morphological functioning of the forms of which they are parts, viz , intransitive> transitive; non-tense> past tense, etc." This problem can be easily resolved by considering the PP in such cases as the result of a morphophonemic change which takes place after the addition of the transitive or the past tense marker to the underlying base (for details on this, see Subrahmanyam 1971).

considering the *i* in *ko;lī* 'fowl' or the *ay* in *ya:nay* (Te. *e:nūgu*) 'elephant,' as a derivative suffix. Secondly, even in clear cases in which the segmentation into "root" and "derivative suffix" is easily justifiable, shortening of a long vowel or a double consonant of the root does not normally take place as far as nouns are concerned. Examples are \**na:l-ay* 'tomorrow' from \**na:l* 'day' (3025), \**ni:r-am* 'moisture' from \**ni;r* 'water' (3057), Ma. *ku:l-am* 'rice, as eaten in temples' from \**ku:l* '(semi-liquid) food' (1592), Te. *ko:l-a* 'arrow' from \**ko:l* (1852) and so on; in verbal nouns like Ta. *ni:l-am* 'length' (from *ni:l* 'to be elongated'), Ta. *pa:t-al* 'song' (from *pa:tū* 'to sing'), *kałl-an* 'thief', *kałl-i* 'a female thief' and *kałl-am* 'theft' (all from *kał-* 'to steal') and so on (the rule need not operate because there is a morphological boundary).

14. 1.6. The second explanation, which seems to be more satisfactory than the first one, is to say that the rule does not commonly operate in disyllabic nouns as it regularly does in verbs. However, there are a handful of nouns, which have alternate forms, one with a long vowel and the other with a short vowel in the root. The following list is almost complete.

657. Ta. *u:lai* 'howl of dog or jackal', *u:lī* 'sound', *ulai* 'sound'. (647)

658. Ta. *o:l*, *o:lam*, *oli*, *ulappal*, *ulampal* 'sound'. (837)

659. Ta. *ku:lai/kulai* 'mud'. (1514)

660. Ta. *ke:lir* 'friends', *ke:l* 'kindred', *kiłai* 'kindred, relations'. (1678)

661. Ta. *kołi* 'banner', *ko:tū* 'summit of a hill', *ko:tai* 'mountain', *ko:tar* 'peak'. (1704)

662. Ta. *to:l*, *to:lam*, *tolu*, *toluvam*, *toluku* 'cattle-stall'. (2905)

663. Ta. *ni:lal*, *nilal* 'shade, shadow', Te. *ni:da*. (3046)

664. Ta. *piṇam*, *piṇan* 'corpse', Te. *pi:nugu*. (3420)

665. Ta. *pe:lai* 'chest, box', *pila:* 'round wicker-basket'. Ma, *pe:lā*. (3637)

666. Ta. *pu:l* 'hole', *pu:lai* 'opening' Ma. *puļa* 'opening in a wall'. (3542)

667. Ta. *nu:lai* 'opening', *nu:lai* 'hole', Kol. *no:lang-* '(snake) crawls'. (3076)

668. Ta. *mu:lai*, *mu:li*, *mulai* 'ladle'. (4142)

669. Ta. *mu:ri*, *muriyu* 'laziness', *muri* 'curve, bend'. (4080)

670. Go: (Ko.) *ma:ra*, *ma:ṛa* 'tree', Kuvi (Su.) *ma:rnu*, Ga. (S.) *matren* against \**mar-V* ..... in the other languages including many dialects of Gonḍi. (3856)

14. 1.7. Similarly a few nouns have alternants with a single or double consonant before a vowel of the second syllable:

671. Ta. *kil̩lai*, *kili* 'parrot'. (1318)

672. Ta. Ma. *ceti* 'small tree, shrub', Te. *cettu*. 'tree'. (1613)

673. Ta. *nalli*, *nałir* 'crab, lobster', (2362)

674. Ta. *neṭṭil*, *netil* 'bamboo'. (3101)

675. Ta. *paccai*, *pacumai* 'greeness'. *pacai* 'moisture'. (3161)

676. Ta. *pacałai* 'spinach', Te. *baccali*. (3164)

677. Ta. *porai*, *portai* 'mountain, hill', Ma. *porra*. (3730)

678. Ta. *maññai*, *mayil* 'peacock', Pa. *mañjil*, *mañil*. (3793; Pa. *mañil* makes it evident that *mayil* in Tamil and other languages is from \**mañil*.)

679. Ta. *maṭṭu* 'honey, toddy', *maṭṭam* 'toddy', Ma. *maṭu* 'sweetness, honey', *maṭṭu*, 'nectar', Tu. *miṭṭi* 'sweetness', *miṭṭE* 'pollen', (3813)

680. Ta. *maṭṭai* 'leaf-stalk of a fern or palm', *maṭal* 'flat leaf of palm', Ma. *maṭṭa*, *maṭṭal* 'palm branch', *maṭal* 'palm bough', (3814)

681. Ta. *peṭṭai* 'female of animals and birds', *peṭai* 'female of birds'. (3608b)

682. Ta. *mucu* 'langur, monkey', Ma. *mocca*, Ka. *musu(ku)*, *musuva*, Kod. *mucē*, Tu. *mujji*, *mujju*, Te. (*kondā*) *muccu*. (4020)

683. Ta. *viṭam*, *viṭari*, *viṇṭu* 'mountain', Ko. *veṭm*, To. *pōṭ*, Ka. *beṭṭa*, *beṭṭu*, Kod. *beṭṭa*, Tu. *bouṭṭ*, Br. *biṭ*, *buṭ*. (4503)

684. Ta. *veḍli*, *veḍli(yam)*, *viḷa:*; *viḷa(m)* 'viṭari, viṭavu, viṭa:tti 'woodapple'. (4535)

14. 1.8. When the noun becomes a trisyllabic one on account of the addition of an extensional element, reduction of the long vowel or consonant of the root takes place almost regularly as shown by the following instances (a few instances of this are also present in the entries given above).

685. Ta. *iṭṭi* 'meat', *iṭṭaici*. (450)

686. Ka. *guḍdu*, *guḍdi* 'eyeball, egg', *guḍasu* 'anything round'. (1400)

687. Te. *koduku* 'son', *ko:dalu* 'daughter-in-law' (< \**ko:l-a:* 'young woman'), Pa. *korol* 'bride'. Kui *ko:ru* 'new-shoot', Kur. *kho:r* 'leaf-bud', Malt. *qe:ro* 'infant'. (1787)

688. Ta. *na:yigu*, *na:yigu* 'sun', Tu. *nesirī* 'morning' (2371; although this is a trisyllabic noun, the long vowel is exceptiona-

lly preserved in Ta. Ma. To. and Ka. while it is reduced in Tu.)

689. Ta. *tavalai* (Ma. *tavalā*), *tappalai* 'frog' (2536) may be derived from Ta. Ma. *ta:vū*, *tavvu* 'to leap, jump' (2596) as has already been suggested by the *Tamil Lexicon*. This also illustrates the rule under discussion (a cross reference for the concerned *DED* entries is needed).

690. Ka. *toṭṭu*, *toḍambe* 'foot-stalk of a fruit, flower or leaf', (2871)

691. Ta. *nuḷampu*, *nuḷḷal*, *nollal* 'gnat, mosquito'; Go. *nulle:* (3077)

692. Ta; *patti* 'lawless person', *patitu* 'lawlessness'. (3200)

693. Tu. *paḷla* 'ditch, hole', *paḷikE* 'valley, pond'. (3307)

694. Ta. Ma. *puṇuti*, *pu:ṇti*, *pu:ṇi* 'dust'. (3541)

695. Ta. *pe:tai* 'woman', *petumpai* 'girl between the ages of 8 and 11'. (3634)

696. Ma. Ka. *pe:ṛu* 'load', Tu. *perikE* 'a bullock's load' (3641)

697. Ta. *po:ttu*, *pottu*, *pottai*, *potumpu* 'hole'. (3646)

698. Ta. *poṇutu*, *po:ṇtu* 'time', Go. (A. Su.) *poṇd-* (3724 ; the Gondī form must be added to *DED* ).

699. Ta. *maṭṭam*, *maṭṭaku* 'measure'. (3811)

700. Ta. *ma:lai*, *mala* 'youth', *maṭṭalai* 'childhood'. (3887)

701. Ta. *mu:nći* 'face', Ma. *mu:ccu*; Ka. *mu:ti*, *mo:ti*, *musuḍu* *musuḷi*, Tu. *musuṇṭu*, *musuṇḍu*, Te. *mutti*, Go. *moso:r* 'dose' (4129)

702. Ta. *me:ti*, *me:ntu*, *mentiyam*, *ventayam*, *vental*, *ventiyam* 'fenugreek', Ma. *ventayam*, Ka. *mente(ya)*, Te. *menti*. (4161)

703. Ta. *vi:l*, *vilutu*, *viñutu* 'aerial root', Ma. *vilutu*, Ka. *bi:lal*, Te. *u:da*. (4458)

704. Ta. *viciŋi* 'fan', Ma. *visari*, Ka. *bi:sanige*, *bi:sanike* (probably *bi:su* + *anige* / *anike*, as suggested by K. Kushalappa Gowda). Te. *visana-kat̪ra* (all derived from \**vi:c-* 'to blow (as the wind), throw'; 4479)

705. Ta. Ma. *veḷlai* 'white', *veḷli* 'silver', *veḷuppu* 'whiteness', *veḷiccam* 'light', *viḷakku* 'lamp', Ka. *beḷli* 'silver', *beḷ(u)pu* 'whiteness', *beḷaku*, *beḷagu* 'lamp'. Te. *vella* 'white', *vendi* 'silver', *velūgu* 'light'. (4524)

14. 1.9. The above study enables us to make the following important generalization regarding the phonological structure of nominal bases. In disyllabic bases, a long vowel or a long consonant of the root syllable contrasts with a short vowel or a consonant; for example, Ta. *ku:tai* 'basket' (1564) versus *kuṭai* 'umbrella' (1386), Ta. *cūṛam*, 'relative' versus Ta. *cūṛa*, *cūṛa:* 'shark' (2234). Ta. *valli* 'creeper' (4351) versus Ta. *vali* 'wind' (4347) etc. (note that \**l* and \**r* are never doubled in Dravidian). However, a long vowel or consonant is reduced in a small number of such bases (given in 14.1.6 and 14.1.7). This is not a general phenomenon but is only a tendency that is found to occur in a few cases. In trisyllabic nominal bases, on the other hand, the first vowel or the second consonant will be short as a rule and exceptions to this are extremely rare. This rule holds good for trisyllabic verb bases also.

Disyllabic nominal bases differ from disyllabic verb bases with regard to some rules of phonological structure. While there are numerous nouns of the patterns (C<sub>1</sub>)  $\bar{V}_1 C_2 V_2$  (C<sub>3</sub>), (C<sub>1</sub>)  $\bar{V}_1 C_2 C_3 V_2$  (C<sub>4</sub>) and (C<sub>1</sub>)V<sub>1</sub>C<sub>2</sub>C<sub>3</sub>V<sub>2</sub>(C<sub>4</sub>), simple verbs that come under these patterns are totally absent in Dravidian (verbs like *a:tu* 'to move', *ma:ru* 'to change' and *kaṭṭu* 'to tie',

which end in the enunciative *u* and verbs like Ta. *ka:tali* 'to love', which are derived from nouns by the addition of the verbalizer *-i* are not relevant to the present discussion). Therefore any verb that ought to have such a structure owing to the addition of an extensional element that begins with a vowel has to reduce the long vowel or the consonant of the root. This explains as to why this process is so regular in verbs.

14.1.10. There is a set of pairs of noun and the related verb, the noun containing a long vowel (often in the first syllable but rarely in the second syllable) and the verb containing a short vowel as in the following cases (all the following examples are from Tamil except when stated otherwise):

Noun	Verb
706. Te. <i>a:ku</i> 'leaf' (284)	<i>akai</i> 'to sprout' (16)
707. <i>a:vi</i> 'vapour' (334)	<i>avi</i> 'to be boiled' (227)
708. <i>u:lai</i> 'howl of jackal'	<i>ulai</i> 'to howl'. (647)
709. <i>e:ru</i> 'act of hitting'	<i>eri</i> 'to throw' (731)
710. * <i>ka:ram</i> 'pungency'	<i>kari</i> 'to feel an irritating sensation (1227)
711. <i>ka:nal</i> 'heat'	<i>kanal, kanyi</i> 'to be hot' (1183)
712. <i>ku:lai</i> 'mud'	<i>kulai</i> 'to be soft' (1514)
713. <i>cita:r</i> 'cloth, rag'	<i>citar</i> 'to be worn out' (1295)
714. <i>te:ru</i> 'a piece'	<i>teri</i> 'to break, cut' (2829)
715. * <i>to:l</i> 'skin'	<i>toli</i> 'to flay' (2937)
716. <i>nu:lai</i> 'hole'	<i>nulai</i> 'to enter' (3076)
717. <i>paṭa:r</i> 'low bush'	<i>patar</i> 'to spread (as a creeper)' (3182)

718. *mata:r* 'arrogance'      *matar* 'to be arrogant' (3835)  
 719. *ma:lai* 'garland'      *malai* 'to wear (a garland)' (3954)  
 720. *mu:ri* 'a piece of meat' *muri* 'to break' (4078)  
 721. *mu:ri* 'laziness'      *muri* 'to bend' (4080)

There are good reasons to believe that in the above cases the noun is more original and that when it is used as a verb (in some but not in all the languages) the vowel is shortened so as to fit it into the regular pattern of verbs. In at least some of these sets the verb occurs only in a few languages while the corresponding noun is more widely represented and thus has a claim to be considered more original.

14. 1.11. Now we are in a position to summarize our conclusions. The reduction of a long vowel or a consonant of the root regularly takes place in verbs when they become disyllabic or trisyllabic by the addition of an extensional element which is a vowel or one that begins with a vowel (note that the *u* in \**kaṭṭu* 'to tie', *pa:ṭu* 'to sing', etc. is enunciative but not an extensional element). In simple nominal bases this process occurs almost regularly if they are trisyllabic; in the case of disyllabic (nominal) bases, this process is not common although it does operate in a small number of such items. It must also be added that disyllabic nouns that are derived from verbs are never affected by this process while trisyllabic nouns like the following ARE affected by it: Ta. *kaḷ-avu* 'theft' (against *kaḷ-am* 'theft'; 1156), Ta *uṇ-avu*, *uṇ-a:* 'food' (against *uṇṇ-i* 'one who eats'; 516) and Ta. *kōl-ukki* 'hook' (against *kōl-ai* 'plunder'; 1788).

14. 1.12. We must now briefly consider the hypothesis proposed by G. Sambasiva Rao in his 1973 paper. He states (p. 222): "These morpho-phonemic alternations are not

conditioned by phonology but by grammar. A derivative vowel shortens the long vowel of a root (in Krishnamurti's rule) and weakens the geminate (in Emeneau's proposal) only if the derived form belongs to the same form-class... as the original root or stem. Zvelebil's rule also is valid only within the same form-class. The form-classes we are concerned with here are the verbs and nouns which are the major word-classes in Dravidian. I propose here that when verbs are derived from verbal roots or nouns are derived from nominal roots the above-mentioned alternations take place within the root morpheme in Dravidian; on the other hand, no such alternations take place when nouns are derived from verbs or vice versa." In my opinion the hypothesis that the alternations that are under discussion take place only if the derived form belongs to the same grammatical category as that of the original form cannot be held valid for the following reasons.

(1) In Dravidian, as in other linguistic families, there are numerous roots from which nominal, adjectival and verbal bases are directly derived by adding suffixes and in such cases it is hardly possible to tell the original grammatical category of the root. Examples are: \**ka:n-/kany-* vb. 'to see', n. 'eye' (973 & 1209), \**ki:t-/kit-*-V-(cf. Ta. *ciru* (*ci:t-/citt-* before vowel) 'small', *citru*, *cituku* 'to be small', *citukkan* 'boy', *citukki* 'girl', *citumai* 'smallness', 1326), \**ki:(l)* (cf. Ta. *ci:* 'pus' *ci:l* 'pus' Ma. *ci:-* 'to rot'; 1337); \**pal-a* (cf. Ta. *pala*, *palaiya* 'old', *palam* 'very aged person', *palaku* 'to be habituated'; 3296), \**pe:r-/per-*-V- (cf. Ta. *peru(m)*, *pe:r-* 'great', *periyo:n* 'great man', *peru* 'to grow thick', *peruku* 'to become full'; 3613), \**po:r-/por-*-V- (cf. Ta. *poru*, *porutu*, 'to fight', *po:r* 'war', Ka. Te. *po:ru* 'to fight, war'; 3708) and \**ko:l-/kol-*-V- (cf. Ta. *kuļa* 'young', *koluntu* 'tender twig', *kulantai* 'infant', *kuļai* 'to cause to sprout', Go. *ko:ys-* 'to sprout'; 1787).

(2) There are a number of nominal bases like \**ko:l-i* 'fowl' (1852), \**ka:kk-ay* 'crow' (1197), \**yə:n-(ay)* 'elephant' (4235), \**akk-a:* 'elder sister' (24), \**pil-l-ay* 'child' (3449), etc. The roots of them may be considered to be purely nominal since no language has a verb base derived from any one of them. The long vowel or consonant in such nominal roots is not reduced when an extensional element (beginning with a vowel) is added although the derived word is also a noun like the root.

(3) Shortening of the root vowel is found to occur in verbs that are derived from nouns, see 14.1. 10 for examples. Also cf. Ta. Ma. *təŋi* 'to be alone, single' (from \**ta:n* 'oneself'; 2612), and Ta. *tami* 'to be alone' (from \**ta:m* 'themselves'; 2582); the meanings of the nouns *təŋi* 'singleness' and *tami* 'solitude' suggest that they are derived from the corresponding verbs rather than directly from the pronouns.

(4) If Sambasiva Rao's contention were correct, reduction of a long vowel or a consonant should take place in the inflection of nouns and verbs since the grammatical category of these is not changed when inflectional suffixes are added. No such reduction, however, takes place in the inflections of nouns and verbs, cf. for example, Ta. *ka:l-ai*, (accusative of *ka:l* 'leg'), *ka:n-a* 'to see' (infinitive of *ka:n* 'to see'). It will be unnatural to confine the explanation only to derivation. Nouns like *ka:t-ar* 'hilltribes' from *ka:t-u* 'forest; 1206), which are derived from nouns do not show the change and therefore they contradict Sambasiva Rao's claim. It must also be noted that out of the ten examples given by him on pp. 227-8 for absence of change when a verb is derived from a noun, not even a single example is correct or relevant (see 14.2.6)<sup>5</sup>

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<sup>5</sup> In none of these, there is a derivative beginning with a vowel. Note that Sambasiva Rao (1973:227-28) is wrong in considering the final *u* of verbs like *ku:nū* 'to bend' (1605), *pe:nū*

As we have already seen, the only reasonable solution for this problem is to say that the phonological patterns of nominal bases are different from those of the primary verbal bases. The latter have more restrictions on them than the former.

14. 1.13. There are two cases in which the variation between a long vowel and the corresponding short vowel has grammatical function. One is the formation of oblique bases of the personal and the reflexive pronouns (see 14.1.3 above) in which a long vowel is reduced before case suffixes other than the nominative. The second one is the derivation of nouns [from certain verbs of the types (C<sub>1</sub>)V<sub>1</sub>n/n/l and (C<sub>1</sub>)V<sub>1</sub>t/t(u) (all these verbs except that in 731 below are weak). The nouns are made by simply lengthening the vowel of such verbs. They are the following:

722. Ta. *a:tu* 'cooking' < \**atu* 'to cook'. (66)

723. Ta. *a:tu* 'killing', Te. *a:tu* 'a blow' < \**atu* 'to kill, beat'. (67)

724. Ta. *i:tu* 'putting on, fitness', Ma. *i:tu* 'placing'. Ko. *i:r* 'shot, equal', Ka. *i:du* 'putting, equality', Tu. *i:di* 'a pledge', Te. *i:du* 'equal', equality' < \**itu* 'to put'. (375)

725. Ta. Ma. *i:ru* 'termination, ruin' < \**iru* 'to die, end in' (437)

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'to foster' (3633) as a derivative suffix; also note that in Kuv *po:i-hali* 'to hollow out' (3646), *-hali* is the infinitive suffix but it is not part of the base as implied by [him]. In the same way, his assertion that 'transitive verbal stems are formed from existing nominal forms which contain long vowels (consonants?)' (*ibid.*, pp. 228-9) cannot be maintained to be correct because semantically the nouns *a:ttu* 'play', etc. belong to *a:tu* 'to play', etc. but not to the corresponding transitives like *a:ttu*, etc.

726. Ta. Ma. Ko To. *u:n* 'food', Ka. Tu. *u:ta* (< \**u:n-ttam* < \**u:n/\*uñ* 'to eat or drink'. (516)

727. Ta. *u:tu* 'approaching' (not in DED(S)) < \**utu* 'to come in contact with'. (608)

728. Ta. *u:tu* 'affliction' < \**utu* 'to suffer'. (613)

729. Te. (also Ka.) *ka:tu* 'a bite' < \**kaṭi* 'to bite'. (945)

730. Ta. Ma. *ke:tu* 'ruin, evil', Ko. *ke:r*, To. *kō:r* 'corpse, funeral', Ka. *ke:du* 'ruin, evil', Ko~~d~~. *kē:dī*, Tu. *ke:dī*, Te. *ce:tu* < \**keṭu* 'to perish, be destroyed'. (1614)

731. (Old) Ka. *ko:du* 'gift' < \**koṭu* 'to give (to 3rd person)'. (1708)

732. Ta. Ma. *ko:l* 'taking receiving,' Ka. *ko:l* 'seizure, plunder', Te. *ko:lu* 'taking, plunder' (also used as the noun for the reflexive auxiliary *-konu* in Old Te. as in *pogadi-ko:lu* 'praising oneself') < \**koł* 'to take, seize'. (1788)

733. Ta. Ma. *cu:tu* 'heat, burning. Ko. *cu:r*, Ka. *su:du*, Ko~~d~~. *tu:dī* 'torch', Tu. *su:du* 'burning', *cu:du* 'heat', Te. *su:du* 'burning' < \**cuṭu* 'to burn'. (2183)

734. Ta. *ti:n*, *ti:ni* 'food', Ma. Ko. *ti:n*, To. *ti:ny* 'food for animals', Ka. *ti:ni* 'food', Tu. *ti:ni*, *ti:nī* < \**tiṇṇ*/*\*ti:ṇ* 'to eat'. (2670)<sup>6</sup>

735. Ta. *te:tu* 'sting (as of a wasp), < \**teru* 'to burn, sting (as wasp)'. (2832)

736. Ta. Ma. *pa:tu* 'fall, death', *pa:ṭai* 'bier', Te. (> Ka.) *pa:tu* < \**paṭu* 'to perish, fall'. (3190)

<sup>6</sup> Te. *ti:ṭa*, *ti:ṇṭramu* 'itching, itch' does not belong to DED 2670 but properly goes with DED 2678 Ta. *ti:ṭtu* 'to whet, rub', etc. Further, it is possible to combine the entries 2678 Ta. *ti:ṭṭu*, etc. and 2680 Ta *ti:ṇṭu* 'to touch', since \**ti:ṭṭn* is, in all probability, the transitive of \**ti:ṇṭu*.

737. Ta. Ma. *pa:tu* 'coming into being, suffering', Ko. *pa:r* 'work' To. *po:d* 'suffering', Ka. *pa:du*, *pa:tu*, (<Te.) 'suffering, state', Tu. *pa:du* 'mode, form', Te. *pa:tu* 'labour, suffering' < \**pa:tu* 'to happen, suffer'. (3191)

738. Ta. Ma. *pe:tu* 'acquisition, childbirth', Tu. *pe:tu*, *pe:ti* 'parturition childbed' < \**peru* 'to obtain, beget'. (3622)

739. Te. *po:tu* 'battle', Ga.(S) *po:du* 'fight' < \**pot-* 'to beat, strike, winnow'. (3493)

740. Te. *po:tu* 'stab, pain' < \**pot-/pol-* 'to pierce, split' (3725)

741. Ta. *mi:n* 'star', Ma. Ko. To. Ka. *mi:n*, Go *mi:nko:* 'the stars which a stunned, dazed or liverish man sees', Kur. *bi:nko:* 'star', Malt. *bi:n̩ke* < \**minnu* 'to shine, glitter'. (4994)

742. Ta. *vi:tu* 'emancipation, freedom, house', Ma. *vi:tu* 'freehold property, house', *vi:takam* 'dwelling', Ko. *vi:r* 'act of releasing', Ka. *bi:du*, *bi:dike*, *bi:ra:ra*, *bi:dara* 'leaving, camp, house', Kod. *bu:di* 'hut of a toddy-tapper', Tu. *bi:du*, *bu:du* 'residence of a headman', Te. *vi:du* 'town, camp' < \**vitu* 'to leave, release'. (4419)

743. Te. *vi:nu* 'ear, celebrity' < \**vip-* 'to hear, ask'. (4472)

Such nouns are found to occur only in South Dravidian and Telugu; even in Telugu, nouns of this type exist for verbs ending in *tu* and one each for those ending in *n* and *t* but not for those ending in *n* or *tu*. Even then, this must be considered as a very old process which has been lost in the Central and the Northern subgroups (there is, however, a solitary instance in Gadba (Salur) in example 739 above).<sup>7</sup>

<sup>7</sup> The *t* in Te *a:tu*, *pa:tu*, *ka:tu*, *ce:tu* and *po:tu* is aberrant since comparative evidence leads us to expect *d* which represents PDr. \**t*. In these, *d* seems to have been replaced by *t* on the analogy of verbal nouns like *pa:ta* 'song' (< \**pa:t̪i-* from *pa:du* 'to sing') and *a:ta* 'play' (< \**a:t̪i-* from *a:du* 'to play').

#### **14. 2. Additional Remarks on Quantitative Variation.**

14. 2.1. After the publication of P. S. Subrahmanyam's 1975 paper (which is almost identical with 14.1) two articles that have a bearing on the present topic have appeared. One is Sambasiva Rao 1977, in which Sambasiva Rao made an attempt to reply to the criticism of his proposal (see 14.1. 12.) and the other is Subrahmanyam 1977b, which is a critique of Sambasiva Rao's reply in his article just referred to.

It is worth-while to emphasize the following points for a clear understanding of the nature of QUANTITATIVE VARIATION, which can be represented in the form of a rule as follows.

$$[\text{Sy}_1] \rightarrow [-\text{long}] / -V$$

(It means: a word-initial syllable loses the length either of its vowel or its second consonant when the word is extended by the addition of a derivative element begining with a vowel. As pointed out in the main body of this chapter, the rule is regular in simple verb bases and in simple trisyllabic nominal bases but it is rare in simple disyllabic nominal bases.)

14. 2.2. Quantitative variation was a very old process which operated in early stages of Dravidian. As such, it did not affect forms in the daughter languages which have come into vogue or which became eligible for undergoing the rule because of certain other changes like the insertion or the loss of a vowel after the quantitative variation has ceased to operate. Words of the former type are Ta. *akkai*, *akkrai* 'concern' (23). Ta. *anka:ti* 'bazaar' (37), Ta. *mu:lañki* 'radish' (4105; this seems to be *mu:l(ə)am* 'thorny' + *ka:y* 'unripe fruit'), etc.; Te. *na:luka* (<*na:ika*) 'tongue', Ka. *na:lage*, *na:lige* (<*na:lge*) (3009), Ka. Te. *mu:lugu* (< *mu:lgu*) 'to groan' (4010b), Te. *e:ð(u)cu* 'to cry' (240), Te. *na:lugu* (< *na:lgu*)

'four' (3024), *e:nūgu* (< *e:ngu*) 'elephant' (4235), etc. are due to the insertion of the vowel while *Ka. kartale*, *kattal(e)* (<*karuttalay*) 'darkness' (1073b), *iddal*, *ijjalu* (< \**iruntal*) 'charcoal' (2102), etc. are due to the loss of the second vowel.

Because it is a very old process, it does not operate in secondary derivation, that is, when a second derivative is added to a stem already containing a derivative. For example, Ta. *po-kk-aṇai* 'hole in a tree' — in this the root is *po-* 'to perforate' from which *po-kku* 'hollow in a tree', is first derived; no change takes place when *-aṇai* is later added to it; same is the case with *po-tt-ilam* 'hole in a tree', which is derived from *po-ttu* 'hole' (3646; in *po-t-umpu* 'hole', which seems to have undergone the change, the single *-t-* is original).

14.2.3. That quantitative variation was not restricted only to derivation is clear from the fact that it operated in the inflection of personal and reflexive pronouns.

14.2.4. Quantitative variation is one of the rules that operated only in etymological derivation but not in synchronic derivation or inflection (except pronouns). Other such rules are (i) heightening of short mid vowels before *a* in Tamil-Malayalam (15.1.5) and (ii) heightening of short mid vowels before a high vowel in Kannada (19.3.). This restriction can be explained in a natural way by saying that alternations like the above operate only in monomorphemic stems but not across morpheme boundaries.<sup>8</sup>

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<sup>8</sup>. Morpheme boundaries are relevant for phonology. For example, in English, consonant clusters in which the first member is a stop and the second member is a nasal homorganic with it as in *catnap*, *topmost*, *wet-nurse* are possible only across morpheme boundaries. Telugu contains an interesting case of a phonological rule operating only across a single morpheme boundary. It is the well known vowel assimilation rule: (*u<sub>2</sub>* means *n* of the second syllable)

This agrees with and gives further support to the already established fact that the majority of the derivative elements do not have any semantic value. The absence of quantitative variation in nouns derived from verbs appears at the surface level to be due to change of grammatical category but that this is not the real explanation is abundantly made clear by a large number of exceptions in simple disyllabic nouns. Syllabic structure is more relevant for a phonological rule rather than the fact whether it brings about a change in grammatical category or not.

This is the real reason why quantitative variation does not operate in nouns derived either from verbs or nouns, for example, Ta. *pa:t-al* 'song' (from *pa:tu* 'to sing', 3348), *ko:r-ikkai* 'request' (from *ko:ru* 'to request', 1848), *ka:t-ar* 'hill tribes' (from *ka:tu* 'forest', 1205), *ka:tal-an* 'lover' (from *ka:tal* 'love', 1211) and so on.<sup>9</sup> Such cases are just similar to Ta. *kot-ai* 'gift' (from *ko:du* 'to give', 1708), *cel-avu* 'expenditure' (from *cel* 'to go', 2286), etc. which are not affected by \**i/e* and \**u/o* alternation.

$$u_2 \rightarrow \begin{bmatrix} i \\ a \end{bmatrix} / -C \quad \begin{bmatrix} F.V. \\ a(:) \end{bmatrix}$$

e.g. \**adug-i* > *adig-i* 'having asked', \**adug-a* > *adag-a* 'to ask' (from *adugu* 'to ask'). The rule does not operate if there is a morpheme boundary between the *u* and the following consonant: *gadu-l-a* 'of the rooms' (*gadi* 'room'), *ra:ju-l-a* 'of the kings' (*ra:ju* 'king'), *batuku-l-a* 'of the lives' (*batuku* 'life'); cf. also Old Te. *tammu-n-i* 'of the younger brother' (*tammūdu* 'younger brother'), *guru-n-i* 'of the teacher' (*gurūdu* 'teacher').

<sup>9</sup>. Nouns derived from nouns by means of adding gender suffixes, which do not show quantitative variation, are against Sambasiva Rao's proposal. He fails to account for them properly (Sambasiva Rao 1973:226). According to the present explanation, they need not undergo the change because a morpheme boundary is involved.

In trisyllabic nouns a clear distinction has to be made between synchronic derived nouns and other nouns because quantitative variation operates in the latter but not in the former. This gives strong support to the view that the domain of quantitative variation is only etymological derivation but not synchronic derivation.

14. 2.5. Simple disyllabic nouns (with a long vowel or a long consonant in the first syllable), which have not resulted from synchronic derivation are, then, the real exceptions to the rule of quantitative variation, e.g. *ya:n-ai* 'elephant', *ka:t-al* 'love', *null-al* 'mosquito', etc. There are two ways to explain this aberrancy —one is to say that quantitative variation operates rarely in such nouns (in other words, most of these words have to be marked minus for this rule) and the other is to say that these are underived words. The second explanation, preferred by Sambasiva Rao (1977) will not hold good for the reasons given in 14. 1. 5. (note that in some of these there is enough evidence to warrant segmentation, for example, in Ta. *ya:n-ai*, Te. *e:n-ugu*, *e:n-ika* (example 1103) different derivatives appear in the two languages). Therefore, in my opinion, the first explanation is preferable. Phonological rules in natural languages do have restrictions depending on the number or prosodic length of syllables, the grammatical category of the word (or morpheme) and so on. A phonological rule may depend on the grammatical category of the output (as in English *wives* but *wife's*) but to say that a phonological rule operates only when the grammatical categories of the input and the output are one and the same is difficult to accept. Particularly such a stand need not be taken when a more natural and simple explanation is available.

14. 2.6. Sambasiva Rao (1973) gave ten instances, which according to him, show absence of quantitative variation when

verbs are derived from nouns. None of these is relevant for a discussion of quantitative variation because they do not have a derivative element beginning with a vowel and hence they are outside the scope of the operation of quantitative variation. His claim is that his proposal explains forms that are left unexplained by "Krishnamurti's rule" and "Emeneau's rule" but these cases are not at all in the purview of the above rules. Moreover, as I have pointed out (1977b, para 7), in many of these there is no genuine reason to think that the nominal base is more original than the verb base and these entries themselves contain evidence that is against Sambasiva Rao's contention. Let us briefly discuss the examples.

1 (DED 3645). The root in this is *\*po-/\*po:-* (Ta. *po* 'to perforate') and the derivatives are *\*y* (Ta. *poy* 'to be hollowed, n. hole'), *\*k* (Ta. *poku* 'to perforate'), *\*kk* (Ta. *pokku* 'hollow in a tree', *pokkai* 'little hole', Ka. *bokke*, Te. *bokka*, Kol. Nk. *pokka*), *\*t* (Ta. *potu*, *potir* 'to be perforated', Ma. *po:tu* 'hole', Ka. *hodaru*), *\*tt* (Ta. *pottu*, *po:ttu*, *pottal*, *pottai* 'hole', Ma. *pottu*, Te. Pa. *botta*, Kuwi(F) *po:t-*, (S) *pot-* 'to hole', Konda Pe. *pot-*, Kur. *patt-*, Malt. *pattr-*), *\*nt* (Ta. *pontar*, *pontu* 'hole', Te. *bonda*, Kui *pondo*), *\*ŋ* (Ta. *po:ŋ* 'cave'), *\*rr* (Go. *pohpi:* 'chisel', Kui *pos-* 'to pierce').

There is no reason to think that the noun is original in this group since the verb also occurs in Tamil, Konda-Pengo-Kui-Kuwi and Kuřux-Malto. If what Sambasiva Rao means is that the noun as in Ta. *po:ttu* is used in Kuwi (F) *po:t-* as a verb without change, what about the verbs Kuwi (S) *pot-*, Ta. *potu*, *potir*? In these, shortening should not have occurred because of the change in the grammatical category (according to him); *pottu* does not occur as a verb in Tamil. (Fitzgerald's recording may not be correct because in all other cases the verb contains only a short vowel.)

2. (DED 1605). In this the root is *\*ku:n-/kun-i*. Both the variants are used both as a noun and a verb in many languages, cf. Ta. Ma. Ka. *ku:n* 'bend, hump', Te. *gu:nu*; Ta. Ma. *ku:n*; Ta. Ma. *ku:nu* 'to be crookbacked', Ko. *ku:n* (*ku:nθ-*) 'to be bent', Ka. *ku:n* (*ku:nt-*), *ku:nu* || 'to be bent or bowed'; Ta. Ma. Ka. *kun-i* 'to bend (as a bow), n. curve'. There is no compelling reason to consider the noun as original here; even if we agree with Sambasiva Rao in this respect for the sake of argument, the verb *kun-i* cannot be explained as derived from the noun because it shows the change. To suppose that the verb *ku:nu* is derived from the noun *ku:n* and then the verb *kun-i* is derived from the verb but not from the noun would be quite ad hoc.

3. (DED 1834). In this, the root *\*ko:n-* (Ta. Ma. Ka. *ko:n* 'crookedness, angle', Te. *ko:na* 'corner') occurs as a noun in many languages but the verb occurs only in Ta. Ma. (Ta. Ma. *ko:nu* 'to be bent', Ta. *kunaku* 'to become bent', *kunakku* 'to bend (tr.), n. crookedness', *kunukku* 'to bend ||(tr.)'). If the noun is original here as thought by Sambasiva Rao, the verbs with the change and the nouns Ta. *ko:n-am* 'curve', *ko:n-al* 'hump', *ko:n-an* 'humpback' and *ko:n-ai* 'curvature' without it are against his proposal.

4. (DED 3633). According to Sambasiva Rao, the root in this, i.e. *\*pe:n* was only a noun (Ta. *pe:n* 'protection') and Ta. Ma. *pe:nu* 'to foster', which is derived from the noun does not show the change. But what about the nouns Ta. Ma. *pe:n-am* 'care', Ta. *pe:n-al* 'nursing' without the change and the Telugu verb *pen(u)cu* 'to nurture' with the change? The argument that the latter forms are derived from the verb but not from the noun will have no philological or other evidence to back it up. The oddity of such an argument will be evident from Ta. *pinai* 'protecting with loving care', which has to be derived from the noun.

5.(DED 3634). The root in this entry is \**pe*:- with the derivatives \**t* and \**nt*: Ta. *pe:tu* 'folly', *pe:tai* 'ignorant person', *pe:ntu* 'to be bewildered', Te. *pe:da* 'poor (man)'. Even if we suppose that there was the noun \**pe:nt* originally, it need not shorten its vowel when it is used as a verb because there is no derivative vowel here.

6.(DED 286). The root in this entry is \**a*:- with the derivatives \*(*m*)*pp* (Ta. Ma *a:ppu* 'wedge', Te. *ã:pu* 'to stop (tr.)', and \**nk* (Te. *ã:gu* 'to be stopped', Kui Kvwi *a:ng-*). There is no vowel derivative in any language here and therefore the question of shortening of the root does not arise at all

7. (DED 3819). The root in this is \**ma*:- with different derivatives all beginning with a consonant as in the above case cf. Ta. *ma:cu* 'cloud', *ma:l* 'blackness'. If, as implied by Sambasiva Rao, Ka. *ma:su* 'to grow dim' and Te. *mã:gu* (*paðu*) 'to become black' do not show the change because they are derived from the noun \**ma*:, then, why do the nouns like Ta. *ma:-mai* 'blackness', *ma:-l-ai* 'evening' fail to show the change.?

8. (DED 4043). In this, *muṭṭu* 'to touch, n. touch, menses' is there both as a verb and as a noun in Ka. Tu. and Te. Tamil contains only the noun but not the verb but Malayalam contains only the verb. The Tamil evidence alone is not sufficient to say that the noun is original here. Further, there is no derivative vowel in the verb. If the noun were original here, how can he explain the absence of change in the nouns like Ka. *muṭṭ-al(e)* 'touch, menses', etc.?

9 (DED 1562) and 10 (DED 290). Sambasiva Rao claims that in these two cases (and in such others), the verbal nouns \**ku:ṭṭu* 'union' (from \**ku:ṭu* 'to join') and \**a:ṭṭu* 'play, movement' (from \**a:ṭu* 'to play, move') have been used as transitive verbs in later stages. What semantic justification is there

in saying that a verbal noun without any transitive signification was later used as a transitive verb? If transitive verbs ending in PP (corresponding to intransitives in (N)P) are not found in some of the languages, it does not necessarily mean that they were not there in the parent speech. He resorted to this strange explanation because he was under the impression that these are exceptions to "Zvelebil's rule", which, however, need not be considered as a regular rule.

#### **14. 3. Long Vowels Before *y* In Telugu Bases**

14. 3.1. One of the problems in Dravidian comparative phonology is the correspondence between a long vowel (other than *a:*) in Telugu and a corresponding short vowel in the other languages before the consonant *y*. As shown by the following sets, this correspondence is found in both nouns and verbs.

744. Te. *e:yu* 'to throw' : Ta. Ma. Tu. Pa. *ey-*, Ka. *esu*, *ey*. (691)

745. Te. *ko:yu* 'to cut, reap' : Ta. Ma. Ko. Ka. *Kođ*. Tu. Pa. *Go*. *koy-*. (1763)

746. Te. *ce:-yi* (obl. *ce:-ti-*) 'hand' : Ta. Ma. *kai*, Ka. *Go*. *kay*, Kol. Pa. *key* 1683.

747. Te. *ce:yu* 'to do, make' : Ta. Ma. *cey-*, Ko. *gey-*, Ka. *Kođ*. *key*. (1628)

748. Te. *ne:yi* (obl. *ne:-ti-*) 'ghee' : Ta. Ma. Ka. *Kođ*. Tu, Kol. Pa. *ney*. (3104)

749. Te. *ne:yu* 'to weave' : Ta. Ma. Ka. Tu. *ney*. (3103)

The above mentioned correspondence contrasts with the correspondence: long vowel in Telugu corresponding to a long vowel in the other languages before *y* found in sets like the following:

750. Te. *no:yu* 'to ache' : Ta. Ma. Ka. *no:, no:y.* (3143)

751. Te. *me:yu* 'to graze' : Ta. Ma. Ka. Ko~~d~~. Tu. Go. Pa. *me:y-*. (4179)

752. Te. *ve:yu* 'to thatch' : Ta. *ve:y*, Ma. *me:y*, Ko. *ve:j-* To. *pe:y-*. (4552)

In the second correspondence seen in sets 70 to 752, all the languages show long vowels and therefore we can reconstruct the long vowels for Proto-Dravidian in them. The first correspondence exemplified in sets 744 to 749 contrasts with the second one and therefore, according to the usual method of reconstruction, we must reconstruct short vowels in this group of sets and explain that in Telugu original short vowels became long, or in other words, merged with the corresponding long vowels in the environment, before *y*.

14. 3.2. Before investigating the reasons for the lengthening of original short vowels before *y* in Telugu, we must discuss Bh. Krishnamurti's explanation for this phenomenon. He says (1955 : 243f.): "An examination of a number of monosyllabic stems such as these in final -*y* shows that there was probably no contrast in Proto-Dravidian between short and long vowels (*i*, *u*, *e*, and *o*) before a -*y* in unbound root morphemes. In other words, length was non-phonemic in sequences of V + *y* in radical syllables." Also: "One more case of the occurrence of long vowels, rather than lengthening, in Telugu, is when the radical vowel is followed by *y*. A comparison of vocabulary where radical vowel (other than *a*) is followed by *y*, shows that long and short vowels do not contrast in this position in most of the Dravidian languages." (Krishnamurti 1961 : 124f). He himself has noticed some minimal pairs that contradict his theory like the following in Tamil:

<i>uy</i> 'to live' (554)	<i>u:y</i> 'to be over ripe' (645)
<i>ey</i> 'to shoot' (691)	<i>e:y</i> 'to resemble' (761)
<i>oy</i> 'to give'	<i>o:y</i> 'to be reduced'
<i>koy</i> 'to pluck' (1763)	<i>ko:y</i> 'vessel for taking toddy' (1842)
<i>toy</i> 'to be weary' (2895)	<i>to:y</i> 'to be wet' (2933)

But he dismisses the validity of their evidence by saying that "all these pairs are not common Dravidian, for instance *u:y*, *e:y*, *o:y*, *koy*, *to:y* are not represented in other languages with contrast pairs." (1955 :243)

However, for establishing a contrast between two phones, it is not absolutely necessary to have minimal pairs. The presence of subminimal pairs will also be sufficient for that purpose provided that the phones in one of differing sets do the condition the phones in the other differing set or sets. Yet Krishnamurti seems to insist on the presence of minimal pairs when he says, "In Tamil there is no contrast between short and long vowels (other than /a/) before -y in the radical syllables: *tuy* 'to enjoy by means of senses, to eat food' (no *tu:y*); *te:y* 'to rub away' (no *tey*); *ney* 'to weave, homo. n. oil' (no *ne:y*); *puy* 'to be pulled out' (no *pu:y*); *poy* 'to lie' (no *po:y*); *mu:y* 'to cover' (no *muy*); *moy* 'to throng' (no *mo:y*).'" (1955 : 243)

It would be quite unreasonable to suppose that in the above instances the initial consonants condition the length of the following vowel since both short and long vowels (of different qualities) occur after the same consonant. This clearly shows that the absence of bases like *tu:y*, *tey* etc. in Tamil is just accidental and is not due to any restrictions in the phonotactic system of that language.

14. 3.3. The following pairs that can be reconstructed for the Proto-Dravidian stage since they are represented by a large

number of languages clearly show that there is contrast between short and long vowels before *y* in all the languages excepting Telugu:

* <i>piy-</i> 'to tear' (3431)	* <i>ti:y-</i> 'to be burnt' (2672)
* <i>puy-</i> 'to be pulled out (3513)	* <i>mu:y-</i> 'to cover' (4025)
* <i>ey-</i> 'to shoot' (691)	* <i>te:y-</i> 'to wear away' (2846)
<i>key-</i> 'to do' (1628)	* <i>ye:y-</i> 'to thatch' (4552)
* <i>ney-</i> 'to weave' (3103)	* <i>me:y-</i> 'to graze' (4179)
* <i>koy-</i> 'to pluck' (1763)	* <i>to:y-</i> 'to be wet' (2933)

If we take the individual languages into consideration we will have a number of minimal pairs like Tamil *cey* 'to do' (1628) : *ce:y* 'child' (2311); *poy* 'lie' : *po:y* 'having gone' (3734), etc.

We must, therefore, conclude that the merger of the original short vowels with the corresponding long vowels before *y* in Telugu is an innovation in that language.

14. 3.4. We can easily find out the reason for this lengthening of short vowels in Telugu if we look at the past adverbial participles and verbal nouns formed from these verbs. The past adverbial participles *ko:si* 'having cut', *ce:si* 'having done', etc. descriptively contain the participial suffix *-i* which causes the morphophonemic change *y* → *s/- Front Vowel*. (Since in all verbs that end in a vowel or consonant other than *y* the participial suffix is *-i*, e. g. *cepp-i* 'having told', pp. of *ceppu* 'to tell' it is descriptively simpler to consider the suffix as *-i* rather than *-si* in *y*-ending verbs also.) Historically, however, as first demonstrated by Krishnamurti (1961 : §§ 2.42-6: 85-7; see also Subrahmanyam 1969, §6), the participial suffix in them is *\*-si* and the pre-Telugu forms of them must have been \**koy-si* (cf. Go. *koy-si:*), \**key-si* > \**cey-si* (cf. Go. *ki:-si:*) etc.

These became the present-day Telugu forms by the dropping of the *y* (to avoid the non-permitted cluster *ys*) and compensatory lengthening of the preceding vowel.

Similarly the verbal nouns of these verbs are *kō:ta* 'cutting', *cē:ta* 'action', *nē:ta* 'weaving' etc. the pre-Telugu forms of which must respectively be *\*koy-n̥ta* (cf. Ka. (*koy-ita*), *\*key-n̥ta* (cf. Ta.Ma. *cey-ti*; Ka. *key-ta*), *\*ney-n̥ta* (cf. Ma. *ney-ttu*), etc. These forms also have undergone the loss of *y* (to avoid the cluster *ynt*) and consequent compensatory lengthening of the preceding vowel.

Krishnamurti (1955 :244) has illustrated the operation of the same change in some Telugu verbal bases : *tū:gu* 'to doze' (< \**tuy-n̥k-*, 2777), *pī:ku* 'to pull out' (< \**piy-n̥k-*, 3457), etc.

The same type of change is found in Kannada in a few instances like *ge:-me/gey-me* (<*key-may*) 'work'; *koy-d/ko:d-*, past stem of *koy* 'to cut' and *ney-ge / ne:-ge* (also Tu. *ne:-ge*) 'weaving' (< \**ney-kay*).

14. 3.5. Four nouns ending in *yi* in Telugu namely, (Old) *ce:yi/* (colloquial) *ceyyi* 'hand', *ne:yi/neyyi* 'ghee', *nu:yi/nuyyi* 'well' and *g(r)o:yi/goyyi* 'pit' have respectively *ce:-ti-* (cf. Go. *kay-d-*), *ne:-ti-* (cf. Go. *ni:y-d*) *nu:-ti-* (cf. Koya *nuy-d-*) and *go:-ti-* as the oblique bases and *ce:tulu* 'hands', etc. as plurals. The corresponding forms in Gondi and Koya make it evident that the Telugu oblique bases are from earlier *\*kay-tt-*, *\*ney tt-*, etc. by the dropping of the *y* and consequent compensatory lengthening of the preceding vowel. The same sort of explanation can be given for the plural forms of these nouns also

14. 3.6. It is clear from the preceding discussion that in pre-Telugu the verbs and nouns in the sets 744 to 749 ending in

*y* had only one form with a short vowel and that in Telugu they developed another variant with the corresponding long vowel and without the *y* before suffixes beginning with a consonant. This situation is preserved intact by colloquial Telugu whereas in Old Telugu the variant with the long vowel (followed by *y*) analogically replaced the variant with the short vowel that occurred before a suffix beginning with a vowel or before pause. Contrast (Old) *ce:y-a-nu* : (colloq.) *ceyy-a-nu* 'I will not do', (Old) *ce:y-an* : (colloq.) *ceyy-a* 'to do', (Old) *ce:yi* : (colloq.) *ceyyi* 'hand', etc. (In colloquial Telugu the *y* gets automatically doubled because it occurs after a short vowel of the initial syllable.) Probably even in Old Telugu this change might have taken place only in that dialect which formed the basis for literary composition and the other dialects might have been preserving the two alternants. This assumption is further supported by the fact that there are instances in the literature of the 16th century of forms of the colloquial type like *ceyy-an* (in *Ka:ɻahastima:ha:tmyamu* by *Dhu:rjaṭi*) instead of the more common *ce:y-an* 'to do', etc.

Both Old and colloquial dialects, however, have the variant with the long vowel before the causative suffix *-incu* although it begins with a vowel : *ce:y-incu* 'to cause to do', *ko:y-incu* 'to cause to pluck', etc. The explanation for this is that in pre-Telugu the causative suffix might have been *-vincu* with an initial *v* and the forms at that stage might have been \**key-vincu-* (cf. Ta. Ma. *ccy-vi*), \**koy-vinc-* (cf. Ta. Ma. *[koy-vi-]*), etc. In these forms the *v* rather than *y* has been dropped entailing compensatory lengthening of the preceding vowel. The reconstruction of the causative suffix as *-vinc-* will also explain the apparent irregularity of *y* not changing to *s* before *-incu* (for more discussion on the causative suffix in Dravidian, see Subrahmanyam 1971, § 1. 27.).

**\*i / \*e and \*u / \*o Alternation in South  
Dravidian and Telugu Kuwi**

**15.1. \*i/\*e and \*u/\*o Alternation in South Dravidian and Telugu**

15.1. In the South Dravidian languages and in Telugu, there are restrictions on the occurrence of short vowels in the root syllable when it is followed by a derivative element beginning with *-a*. Thus, in Old Tamil and Old Malayalam, the mid vowels *e* and *o* do not normally occur in the root before *-a* (see 15.1.5 for exceptions) while in Kota, Toda, Ko~~z~~agu, Kannada and Telugu, the high vowels *i* and *u* do not occur before *-a* (see § 15.1.6. for Tu~~z~~u). Because of such a restriction, Tamil-Malaya~~z~~am words with *i* or *u* followed by *-a* have cognates in the other languages mentioned above with *e* or *o* followed by *-a* and this situation poses a problem for the reconstruction of the root vowel *z* in Proto Dravidian in such cases. Note that this disagreement among the languages occurs only when the root vowel is followed by a single consonant but not when it is followed by a double consonant or a consonant cluster; the root vowel is uniformly preserved in the latter case. Moreover, when the derivative element begins

with the vowel *i* or *u* also, there is no disagreement among the languages regarding the root vowel which can be any one of the vowels. From this, it follows that before *-a* some instances of Ta Ma. *i* and *u* are derived from \**e* and \**o* respectively and some instances of *e* and *o* in the other languages mentioned above are derived from \**i* and \**u* respectively. In spoken Tamil and spoken Malayaḷam earlier *i* and *u* change to *e* and *o* respectively before *-a*.<sup>1</sup> According to Zvelebil (1970: 69), this shift is absent in Ceylon Tamil.

T.Burrow (1940-42, reprinted 1968:18-31) for the first time proposed rules for discovering the original vowel in cases that show such a variation. Earlier the problem was discussed by K V. Subbayya (1909), L. V. Ramaswami Aiyar (1936), E. H. Tuttle (1930) and T. N. Sreekantaiya (1935). All of them considered Ta. Ma. *i* and *u* to be original and *e* and *o* of the other languages to be secondary in all cases.

That they were influenced by the development in colloquial Tamil and Colloquial Malayaḷam is evident from the following statement of Ramaswami Aiyar (1936: 432): "The literary varieties of Tamil and Mal. show in the above circumstances the *i*- forms, while the colloquials show *e*- words: in Kann. and Tel., even the literary speeches have accepted a number of *e*- forms". Moreover, K. V. Subbayya was wrong in saying that this alternation takes place only before cerebrals and liquids (that are followed by *-a*). On the other hand, Ramaswami Aiyar's observation that this alternation takes place only when the root vowel is followed by a short

<sup>1</sup>. Old Ta. *ilai*, Old Ma. *ila* 'leaf' > Mod. Ta. *ele*, Mod. Ma. *ela*; Old Ta. *kuṭai*; Old Ma. *kuṭa* 'umbrella' > Mod. Ta. *kode*, Mod. Ma. *koḍa*; Old Ta. Ma. *itam* 'place' > Mod. Ta. Ma. *etam*; Old Ta., Ma. *oral* 'mortar' > Mod. Ta. *orali*, Mod. Ma. *orale*.

consonant is correct in general although Burrow (1968 :20 takes exception to this on the basis of cases like the following, which, however, are few:

- (i) Ta. *pun̩nai*, *piññai* 'mast-wood, *Calophyllum inophyllum*' Ma. *punna*. Ka. *punike*, *ponne*, *honne*. Te. *ponna* (3562)
- (ii) Ta. *muṭṭai* 'egg', Ma. *muṭṭa*, *moṭṭa*, Ko. *moṭ*. To. *muṭy*, Ka. *moṭṭe*, Koḍ. *muṭṭe*. Tu. *moṭṭe*. (4048).
- (iii) Ta. *mullai* 'Arabian jasmine, *Jasminum sambac*'. Ma. *mulla* Ka. *molle*, Te. *molla*. (4090)

Burrow (1968 : 22) has suggested that the original vowel for each set can be found out by looking at related words in which the derivative syllable does not begin with -a.<sup>2</sup> Bh. Krishnamurti (1958) also followed him. The following criteria will enable one to discover the original Proto-Dravidian vowel: (i) related word in which the root contains a short vowel and is followed by either no derivative element or one that begins with -i or -u; and (ii) a related word in which the root contains a long vowel or a double consonant (for this purpose it is immaterial whether or not such a root is followed by a derivative element beginning with a vowel (including a) because such a derivative element can have no influence on this type of root). Such a related word may be available either in the literary languages or in the non-literary

<sup>2</sup> 'Obviously then, no progress is to be made by comparing merely the words themselves in question in the different languages. There remains, however, one profitable method of approach, namely to compare them with kindred words in which the radical *i* (*e*) and *u* (*o*) are not followed by *a* or *ai*. A result of such juxtaposition is to see immediately that in these cases original *i* and *e* are confused as *i* in Tamil and Malayalam and as *e* in Kanarese and Telugu. The same, of course, applies to *o* and *u*.'

languages especially of the Central and the Northern sub-groups. (In Toda and Kota and occasionally in some other languages of the southern group, the derivative *a* might have been lost after effecting the root vowel and therefore great caution is needed in using the evidence from these languages). In Kannada in the 8th century A.D., *e* and *o* merged with *i* and *u* respectively when followed in the next syllable by *i* or *u* (provided that the consonant between them is single) and therefore the Kannada evidence too cannot be decisive for determining the original root vowel (see chapter 19)

Examples:

753. Ta. *iran̤tu* 'two'; *iran̤ai* 'couple, pair', *irañtai* 'pair, twins, even numbers'. Ma. *rañtu* 'two', Ko. *eyθ*. To. *e:d*. Ka. *eraðu*, *erðu*, *eraɻ*. Kod. *danyi*. Tu. (B) *eraði*, (C) *raddi*. Te. *rendu*, (The adjective *i:r-* [V/ir-u [C in many languages, Pa. *ir-ðu* 'two things', Kui-Kuwi *ri:* 'two' adj, Kur. *ir b* 'two persons' Malt. *iw-r* 'two persons', and Br. *ir-at*, 'two (entities)', adj *ir-a:* indicate \**i* to be the original vowel in this entry; 401).

754. Ta. *iṭaicci* 'flesh', *iṭti* 'meat', Ma. *iṭacci* 'flesh, meat', Kod. *eraci*. Te. *eraci* (Ta. *iṭṭ-i* indicates that \**i* is original in this entry; 450)

755. Ta. *uṭan* 'together with, immediately after, at once'; *uṭan-paṭu* 'to agree, yield'; *uṭantai* 'union, alliance, relationship'; -*oṭu*, -*o:ṭu* 'with'. Ma. *uṭan* 'together with, at once'; *uṭampeṭu* 'to agree'; *uṭappam*, *uṭanma*, *uṭama* 'friendship, relation'; -*oṭu/-o:ṭu* 'with'. Ko. -*o:ṛ*. To. -*wiṛ* 'with, after'; *wiṭk* 'together, undivided'. Ka, *oḍan*, *oḍam*, *oḍa* 'union, together, as soon as; with'; *oḍam-baḍu*, *oḍa baḍu* 'to agree, consent'. Tu. *oḍa* 'with'; *oḍam-baḍipu-* 'to consent, agree', Te. *oḍa-baḍu*. (Ta.-Ma.-Ko. -*oṭu*, -*o:ṭu*, indicate that \**o* is original in this entry; 798).

756. Ta. *oṭi* (-v-, -nt-) 'to break, snap (intr)', (-pp-, -tt-) 'tr.'; *uṭai* (-v-, -nt-) 'to break as a pot', (-pp- -tt-) 'tr'; *oṭṭai* 'hole, crack in a vessel', Ma. *oṭi-* (-ññ-), *uṭay-* (*uṭaññ-*), 'to be broken', *oṭi-* (-cc-). *uṭe*-(cc-) 'tr.'; *oṭṭa* 'crack, leak, hole'. Ko. *orv-* (*ord-*) 'to break (intr.)'; (*ort-*) 'tr'; *or* 'small crack in wood or iron'; *oṭ* 'hole'. To. *war-* (*warθ-*) 'to break in pieces as pot (intr.)'; *warf-* (*wart-*) 'tr.'; *wiry-* (*wirs-*) '(joints) crack'; (*wirc-*) 'tr.'; *war ady* 'broken pot'. Ka, *oḍi*, *uḍi*, *oḍe* 'to be broken', n. 'fragment'; *oṭṭe*, *oṭe* 'a crack, fracture', Kod., *oḍe-* (*oḍev-*, *oḍand-*) 'to be broken (pot)'; *oḍa-* (-p-, -t-) 'to break (pot)'; *oḍe* 'piece of something hollow or of round fruit'; *oḍeve* 'a break'. Tu. *oḍi-*, *oḍe-* 'to break (intr.)'; *oḍipu-*, *oḍepu-* 'tr'; (C) *uḍepu-*, *uḍevu-* 'to break (intr., tr.)'; *oḍakü*; *uḍetteli* 'bruise'; *oṭṭe* 'hole; broken, cracked'. Te. *oṭti* 'cracked, broken, leaky'. Kol. *oḍ-* (*oḍt-*) 'to burst (intr.)' Nk. Nk (Ch.) *oṛ-*. Pa. *oḍ-*, Go. *woṛ-*, (A.) *oṛ-*, Pe. *oḥ-* (*oṣt-*). Kui. *o:j-* (*o:ji-*). Kuwi (Su.) *o:y-* (*it-*). (\**oṭ-i* in Ta. Ma. Ka. and Tu. and the root with long *o*: in many languages indicate that \**o:/o* is the original vowel in this entry; 799)

757. Ta. *cirai* (-pp-, -tt-) 'to shave, cut with a sickle'; *cira:y* (-pp-, -tt-) 'to get scratched (as in the skin)'. Ma. *cire-* 'to shave, scrape'; *cira* 'shaving; a grater, scraper for coco-nuts' (also *cirava*); *ciraman* 'the god of barbers'; *ciraku-* 'to grate'; *ciranṭu-* 'to scrape'. To. *kerf-* (*kert-*) 'to scratch, egg on'. Ka. *kere* 'to shave, scrape, scratch'; *kiri* (<\**keri*) 'to shave, *keranṭu-* 'to dig with the nails, scratch'; *gere* 'a scratch as with the fingernails'. Tu. *kerepu-* 'to plaster with cowdung solution; 'to scratch, (C) *kirepu-*; *kerencu-*, *keranṭu-* 'to scratch the ground (as a fowl)'; *kireju-* 'to cut as straw, etc., to scrape or clear as the ground'. Kol. *kerk-* (*kerek-t-*) 'to shave'. Nk (Ch.) *ker-* 'to shave'. Pa. *kir-*, *kirv-*, *kirc-* 'to scratch'; *kirp-* (*kirt-*) '(fowl) scratches'. Kur, *xerc-* (*xircy-*) 'to rub off, scour'

Malt. *qerc-* 'to scrape'; *qe:r* 'to shave'; *qe:rtr* - 'to be shaved', *qeru* 'barber'.? Br. *karG-* 'to shear, crop down, mow down'. (Malt. *e:*, *e* and *e* in other CDr. and NDr. languages indicate that *e* is original here though Pa. *i* is problematical; 1305).

758. Ta. *cil* 'some, few, small, slight' *ciiar* 'some persons'; *cila* 'some, a few'; *cilku* (*cilki-*) 'to become few, dwindle'; *cillai* 'humbleness, meanness'; *cirpam* 'fewness, shortness (as of duration)'; *cijmai* 'smallness, fewness'. Ma. *cila* 'some, several'. Ko. *kil gaṭ-* (*gac-*) 'to be too small for one's years'. To. *kīsf* 'a fsw'. Ka. *kela* 'some'; *kelabar* 'some persons'; *kelavu* 'some things'. Te. *cilipi* 'small, slight, despicable'; *cilupa* 'slight, little'. (Ta. *cil*, *cil-ku*, *cill-ai*, *cir-pam*, *cij-mai* and the Telugu words indicate that \**i* is original here; 1308).

759. Ta. *kilakku* 'east, bottom, low place, lowness'. Ma. *kilakku* 'the lowland of the Tamil country, east'; *kili* (-ññ-), 'to descend, be low, degraded'; (-cc-) 'to make to descend'. Ka. *kilgu*, *kirgu* 'to be low, be dwarfish'; *keлагу* 'bottom, down'. Kođ. *kē:kī* 'the east'; *kē:kiō* 'eastern'. Te. *krinda* 'below'; *ki:du* 'harm', Pa. *kiri* 'below'. Kur. *kiyya:* 'beneath, under (postposition, adv.)'; *ki:ta:*, *kiyyanta:* 'lower, lowermost, humble in rank'; *ki:tanta:* 'low-born'. Br. *ki-*, *ki:-*, *ke:-* 'below, down'; *ke:raG* 'bottom, below'. (Ta. Ma. Ka. *ki:l* 'below', Ma. *ki:l i* and the words in the other languages indicate that the original vowel here is \**i:/\*i*; 1348).

760. Ta. *kuṭai* 'umbrella'. Ma. *kuṭa*, Ko. *kor* 'umbrella made of leaves (only in a proverb) (l.w.), *ker* 'umbrella'. To. *kwar*. Ka. Kođ. *kođe*, Tu. *kođe*, (C) *kuđe*. Te. *godugu*. (Te. *god-ugu* indicates that \**o* is original here; 1386).

761. Ta. *ke:l*, 'kindred, friend'; *ke:lir* 'friends, relations'; *ke:ymai* 'friendship'; *kiłai* (-pp-, -tt-) 'to ramify, multiply (as families)'; n. 'kindred, relations, family'. Ko. *kel* 'economic

partnership between Kota and Toda. To. *keL*. Ka. *kele* ‘to draw or attract towards oneself’; *kele*, *gele*, *geñe* ‘friendship; *keleya*, *geleya* ‘male friend’; fem. *keładi*, *gełati*; *ke:la* ‘companion’. Tu. *geñe* ‘coupling’. Kui *kla:mbu* ‘family, lineage, kin, tribe, species’. (Ta. *ke:l* and Ka. *ke:l-a* indicate that \*e:/\*e is original here; 1678).

762. Ta. *imai* (-pp-, -tt-), *nimai* (-pp-, tt-) ‘to wink, glitter; n. ‘eyelid’; *cimił* (-pp-, -tt-), *cimiłtu* (*cimiłti-*), *cimiły* (-pp-, -tt-) ‘to wink’; *cimpuli* (-pp-, -tt-) ‘to close or shut the eyes as in joy, terror, etc.’ Ma. *cima*, *ima* ‘eyelash’; *ime-*, *cimpu-*, *cimmu-*, *ci:mpu-* ‘to blink, twinkle’; *ci:nytu-* ‘to give a secret sign’. Ka. *ime*, *eme*, *eve* ‘eyelash, eyelid’; *cimułu*, *civału*, *civułtu* ‘to twinkle or wink with the eyes’; Tu. *ime*, *sime*, *simme*, (B) *eme* ‘eyelash’. Te, *cimułu* ‘to wink’. (The verbs in various languages with derivative elements beginning with *i* or *u* indicate that \*i is original here; 2097).

763. Ta. *ulai* ‘fireplace, forge, furnace’. Ma. *ula*. Ko. *elka:l* ‘fireplace between two stones’. To. *was* ‘fireplace’ (in songs); *was kal* ‘fireplace of house and of certain dairies’. Ka. Kođ. *ole* ‘fireplace’. Tu. *ole*, *ule*. Pa. *colñgel*, *congel* (*kel* ‘stone’). Nk. (Ch.) *sod-gare*. Ga. (S<sup>2</sup>) *soygel*. Go. *sai:da:l*, (A. Y.) *sodel*, (Mu.) *hoydel*, (Ko.) *ojje:l*. Konđa *solu*. Pe. *hol*. Mandž. *huli*, Kui *sodu*, Kuwi (S.) *hollu* (The words in the Central languages without derivatives indicate that \*o is original here; 2337);

764. Ta. *ni:łal*, *nilal* ‘shade, shadow, lustre’; *ni:łai* ‘light, ustre’; *nilal* (*niłalv-*, *niłanr-*) ‘to cast shadow, give shelter, shine’; *niłali* ‘lustre, light’; *niłarłtu* (*niłarri-*) ‘to shed radiance shade, protect’; *niłaru* (*niłari-*) ‘to shine’. Ma. *niłal* ‘shadow, likeness’; *niłali-* ‘to be reflected, appear faintly (as a tooth through the gums)’. Ko. *nerl* ‘shade’. To. *ne:s* ‘shade, relies preserved for second funeral’; *ne:l poły* ‘house in which relics are

kept, hut at male funeral place'; *ne:l kal* 'flint'. Ka. *nelal, nerał*, *nellu* 'shade, shadow, reflection'. Kođ. *nëla* 'shade, shadow'. Tu. (C) *nireli, ireli*, (B.) *nerali* Te. *ni:da*, Kol. Nk. *ni:nđa* Pa. *ni:ra*. Ga. (Oll.) *nikir*. Go. *ni:nđa:*, *ni:ra* Konđa. *ni:ra*; (BB) *ni:rga* 'shadow'. Pe. *ri:ga* (< \**nri:g-*). Mand. *ri:ge*, Kui. *ru:ga*; (P.) *ru:gedi*. Kuwi (P.) *ri:a*. (The words with the long *i*: in many languages indicate that \**i:/i* is original here; note that *e*: in Toda is due to contraction of *e+a*; 3046).

765. Ta. *nilavu, nila:* 'moonlight, moon'. Ma. *nila:, nila:vū*. To. *nesof* (obl. *nesot-*) 'moonlight'. Kođ. *nelaci* 'moon, nelaci *bolı* 'moonlight'. Te. *nela* 'month, day of full moon, moon'. *ven-nela* 'moonlight'. Kol. Nk. *nela* 'moon' Pa *neliñ* (pl. *neliñil*) 'moon, month'. Ga. (Oll.) *neliñ*, (S) *nelling*. Go. *nele:nj*, (A) *lelle:nj*. Konđa *le:ñju, nela*; *neleñ* (pl.) 'months'. Pe. Mand *le:nj* (obl. *le:c-*) 'moon, month'. Kui *da:nju* (pl. *da:ska*) 'moon, month, season'. Kuwi (Su. P.) *le:nju* (pl. *le:ska*). (The words in Kolami-Parji indicate that \**e* is original here; 3113)

766. Ta. *pukai* 'smoke, mist, vapour, steam'; (-v-, -nt-) 'to smoke'; (-pp-, -tt-) to cause to smoke'; *puka:r* 'mist, fog, haze'. Ma. *puka* 'smoke, vapour', *pukay-* 'to be darkened by smoke'; *puke-*'to fumigate'. Ko. *peg* 'smoke'; *pog, po:* 'tobacco' (l.w.). To. *pax* 'smoke, tobacco'. Ka. *poge, hoge* 'to smoke'; n. 'smoke, steam, vapour'. Kođ. *poge* 'smoke'. Tu. (C) *puge*. (B) *poge*; *puge-* 'to smoke; *pugepu-, pogepu-* 'to fumigate'. Te, *poga* 'smoke, fume'; *pogayu, povayu* 'to smoke'; *pogucu, pogacu* *pogapu* 'to season with spices'; *pogapu, pogupu, po:pu* 'seasoning'. Kol. Nk. Ga. (Oll.) *pog* 'smoke'. Ga. (S.) *po:gu*. Go. (A) *po:ya:;* (Mu.) *poy-* 'to smoke' Konđa. *pogo* 'smoke'. Kui (K.) *po:kari*. Kuwi (Su.) *bo:yi*, (P.) *büy*. (o and the long o: in many CDr. languages indicate that they are original here; 3483).

767. Ta. *vil* (*vit̪p-*, *vit̪t-*) 'to sell, be sold', *vilai* 'price'. Ma. *vila* 'price'; *vil-* 'to sell'. Ko. *vel* 'price'. To. *pil*. Ka. *bil* *bili* 'to sell, buy'; *bili*, *bele* 'price'. Kođ. *bele*. Tu. (C) *bile*, (B) *belε*. Te. *vil(u)cu* 'to sell, buy'; *viluva*, *vela* 'price, cost' The verb root without derivatives indicates that \*i is original here; 4449).

In some cases it will be possible to find out the original vowel by internal reconstruction itself; e.g. Ta *ut̪-ai* (< \**ot̪-ay*), *ot̪-i* 'to be broken' (799); Ta. *pir-a* (< \**per-a*) 'to be born', *per-u* 'to obtain, beget' (3622) Ta. *kuy-am* (< \**koy-am*) 'sickle', *koy* 'to cut, reap' (1763); Te. *vel-a* (< \**vil-ay*) 'price'; *vil-ucu* 'to sell, buy' (4449).

15. 1.2. As pointed out by Burrow (1968:29). we cannot tell the orginal vowel in cases where such criteria are not available, i.e. where SDr. and Teugu contain only words with the derivative element -a (the root vowel being short). We may note the following as examples of such cases.<sup>3</sup>

766. Ta. *ital* 'petal, palmyra leaf'. Ma. [i*tal*. Ka. *esal*. Tu. *esalii* (389).

767. Ta. *ilai* 'leaf'; (-*pp-*, -*tt-*) 'to become green'. Ma. *ila* 'leaf'. Ko. *el*. To. *es*. Ka. *ele*, *ela*. Kođ. *elakanđa*. Tu. *ire*, *ele* (< Ka.). (423).

768. Ta. *uṭal*, *uṭalam*, *uṭampu*, *uṭar* 'body'. Ma. *uṭal*, *uṭalam*, *uṭampu*, Ko. *oṛl*. To. *wiṛL* 'chest of body, desire'. Ka. *oḍal*,

<sup>3</sup> Burrow included examples 762 and 763 as cases where the original vowel cannot be determined because at the time when he wrote the paper the diagnostic words were not available. But later research has made it possible to reconstruct the original vowel in these cases. In a similar way, future research (either comparative or descriptive) may enable us to find out the original vowel in the sets that are at present problematical.

*oḍambi*, *oḍambe*, Tu. (C) *udali*, *uḍa:li*, (B) *oḍali*. Te. *oḍalu* (> *oḷu*). (501)

769. Ta. Ma. *kuḷam* ‘tank, pond’. Ka. *koḷa*, *koḷahe*, *koṇa*. Tu. *kuḷa*. Te. *kolanu*, *kolāku*. (1518).<sup>4</sup>

15. 1.3. Burrow (1968 : 28–29) says: “Original radical *i* and *e*, likewise *u* and *o*, are confused when followed in the next syllable by an *a*-vowel. In Tamil and Malayalam they are represented by *i* and *u* and in Kanarese and Telugu by *e* and *o* respectively. Since this confusion is common to all the languages concerned, we may assume in all probability that it had already taken place in the parent language itself”. The word “parent language” here must be taken to mean Proto-South Dravidian but not Proto-Dravidian because this change affects only the South Dravidian languages. Since there is abundant evidence available now to show that Telugu is not an offshoot of Proto-South Dravidian, we have to assume that the development in Telugu must be independent of that in South Dravidian. We can, however, suppose that this development spread from the neighbouring South Dravidian languages to Telugu at a later stage due to areal contact (another such feature of Telugu is loss of initial *\*c-*; see Chapter 23)

Burrow (1968 : 28) has shown that this change in Kannada and Telugu affected loan words from Indo-Aryan also; e.g. Te. *gonamu* ‘quality’ < Skt. *guṇa-*; Te. *komaru* ‘beauty, youth’ < Skt. *kumara-*; *kolamu* ‘class, caste, genus’ < Skt. *kula-*; Te. *desa*, Ka. *dese* ‘direction’ < Skt. *diśa:-*; Ka. *soga* ‘happiness’ < Skt. *sukha-*; Ka. *devasa-* ‘day’ < Skt. *divasa-*; Ka. *bojanga*

<sup>4</sup>. If this word is related to the verb Ta. Ma. Kod. *kuḷ-i* ‘to bathe’ (1522), *\*u* will be original in this group. Another suggestion is that it is derived from *\*kol-* ‘to receive, take, hold, contain’ (1788); according to this *\*o* will be original. At present, it is better, to leave the matter undecided.

'paramour' < Skt. *bhujanga-*, Ka. *podavi* 'earth' (but Te. *pudami*, < Pkt. *puḍhavi*: < Skt. *pr̥thvi*:-.

15. 1.4. Burrow (in the passage quoted above) observed that the high vowels and the mid vowels merged together in the parent language (i.e. Proto-South Dravidian) itself but he did not say whether the resultant vowels were high or mid. Krishnamurti (1958: 464-465), however, attempted to show that the resultant vowels in Proto-South Dravidian were mid vowels. He based his conclusion on contraction of the root vowel and the derivative vowel which takes place when the intervening \*-k-, \*-y- (< \*-c-) or \*-v- is lost. In such contractions, the root vowel (whether high or mid) is simply lengthened and the derivative vowel is lost if the latter is *i* or *u*; on the other hand, if the derivative vowel is *a*, the root vowel will be only *e:* or *o:* (but not *i:* or *u:*) and the following *a* will be lost. This shows that when these contractions took place, there was only *e* or *o* (but not *i* or *u*) before -*a*. Examples:

769. Te. *niguṭu*, *nivuṭu* 'ashes upon live coal'. Ta. *nivuṭu* (*nivati-*) 'to be powdered' : Ta. *ni:ṭu* (*ni:ṭi-*) 'to become slaked (as lime); be turned to ashes'; n. 'ashes'; *ni:ṛṭu* (*ni:ṛti-*) 'to slake (as lime), reduce to ashes or powder'. Ma. *ni:ṭu* 'to be slaked, burn to ashes'; n. 'ashes' *ni:ṛṭu*. 'to burn to ashes, slake shells for lime'. Ka. *ni:ṭu* 'powder, ashes'. Te. *ni:ṭu* 'ashes upon live coal'. Nk (Ch.) *i:d* 'ashes' Pa. *ni:d*. Ga. *ni:r*. Go. *ni:r*. Konḍa *ni.ṭu*. Pe. *ni:z/ni:s*. Mand. *ni:y-darambu* (3060; Ta. *nivuṭu* with derivative -*a* is problematical).

770. Ta. *uy* (-*v-*, -*nt-*) 'to live'; (-*pp-*, -*tt*) 'to ensure salvation'; *uyir* (-*pp-*, *tt*) 'to revive', n. 'life (animal or vegetable)'; *uyirppu* 'revival, breath, sighing' *ucir* 'life'. Ma. *uyir*, *uśir* 'life, breath'; *uyir-* 'to live'; *uyirppu* 'life, reanimation'. Ko. *ucr* 'life'. To. *ū:r*. *usir*, Ka. *usir*, *usur*, *usuru* 'to speak'; n. 'breath,

life'. Kođ. *usirri* 'breath' Tu. *usuru, usulu, nusulu*'. Te. *usuru, usuru*. Kur. *ujj-* 'to have or take life'. Malt. *uj-* 'to live'; n. 'life' Te. *u:r(u)cu* 'to breathe, sigh'; *u:r(u)pu* 'breath, sigh' (554)

771. PDr. \**te:y* 'honey' represented in many languages may probably be from \**tiy-ay*; cf. Ta. *ti:m* 'sweet'; *ti:vu*, *ti:yam* 'sweetness' Ka. *si:, si:yi, siyyane, sihi* 'sweet'. Te. *ti:ya(na)* 'sweet'. (2674)

772. Ta. *ko:tu* 'horn, branch of a tree'. Ko. *ko:r* 'horns, log'. To. *kwü:r* 'horn, branch', Ka. *ko:du, ko:l*. Tu. *ko:dü, ko:du* 'horn'. Te. *ko:du* 'rivulet, branch of a river'. Pa. *ko:d* 'horn' Ga. (011.) [*ko:r.* Go. *ko:r*. Kui. *ko:ju* 'horn, antler' : Ta. *kuvatu* 'branch of a tree' (Ta. *kuvatu* shows that PDr. \**ko:t- < \*kovaṭ-*; 1824)

773. PDr. \**to:l* 'skin' (2937; example 579) is contracted from \**tok-al*.

774. Ta. *me:* 'excellence'; *me:l* 'that which is over or above, extra'. Ma. *me:* 'over'; *me:l* 'what is above'. Ko. *me:* (*kay/ki:*) 'upper (arm)'. To. *me:l* 'up, high' (in songs) Ka. *me:* 'that which is above, etc.'; *me:l(u), me:la, me:le*, Kod. *me:* (*ma:di*) 'top (story)'. Tu. *me:lü* Te. *me:lu* 'good, advantage' (4173; according to Krishnamurti \**me:(l)* here is derived from \**mik-a(l)*: Ta. *miku* (*mikuv-, mikk-*) 'to exceed, surpass'; *mik-al* 'greatness victory'. Ka. *migu* 'to grow great'; *migil(u), migalu* 'greatness'. Te. *migulu* 'to remain'; n. 'remainder' (3962; DED suggests connection between 4173 and 3966 (Ta. *micai* 'eminence, elevated place, hill'; *mi:* 'top' *micai, mi:cu, mi:tu* 'upper part', etc.).

Krishnamurti (1958 : 465) further derives Ta. Ka. Tu. *to:l*. 'shoulder, arm' (2940) from \**cuv-al*; cf. Ta. *cuval* 'nape

of the neck', *cekil* 'upper part of the shoulders', Ka. *tegal* 'shoulder' Kui *sukori*, *sukoli* 'shoulder-blade' (2221) and PSDr. \**po:k-* 'to go' (3734) from earlier \**puk-a-*; cf. Ta. *puku* (*pukuv-*, *pukk-*) 'to enter', etc. (3481)

The contracted forms in examples 772 and 773 are present in some Central languages and this fact indicates that these contractions took place both in Proto-South Dravidian and Telugu-Kuwi and hence probably dialectally in Proto-Dravidian.<sup>5</sup>

Therefore Krishnamurti's conclusion that Proto-South Dravidian had mid vowels and that they were retained as such by the languages other than Old Tamil - Old Malayalam and common Tuɻu while they were changed into the corresponding high vowels in the latter (the high vowels were again changed into the corresponding mid vowels in the later stages of those two languages) seems to be acceptable. Although this shift in Old Tamil-Old Malayalam (and in Common Tuɻu) looks like dissimilation (Mid vowel → High vowel /- Low vowel), this can only be superficially so because dissimilation in vowels is a very rare process. More plausibly, we can say that structural pressure is the root cause here. That is, in the majority of the cases the original root vowels were high and they remained unchanged before -a; the mid vowels in the root which constitute the minority, changed into [the corresponding high vowels before -a under pressure of the predominant pattern. Andronov's (1977: 223) view that this is a case of hypercorrec-

<sup>5</sup>. Krishnamurti (1958 : 465) thought that the words in central languages other than Telugu in examples 772 and 773 are loans from Proto-South Dravidian and Telugu respectively. There is no need for such an explanation because Gondi-Kuwi also shows lowering of high vowels before \*-a.

tion cannot be accepted because it is not valid for common Tu<sub>lu</sub> and such newly discovered speeches like Ka:<sub>d</sub>ar. The change of high vowels into mid vowels before the low vowel -a in most of the languages can be easily explained as due to assimilation. We can also think of areal spread of this feature from Kannada to the other languages but this is not entirely necessary because the phonetic change concerned is a common and natural one.

15. 1.5. In the languages that show *i/e* and *u/o* alternation, there are certain exceptions as noted by Burrow (1968 : 25–26, and Krishnamurti (1958: 465–468). In the case of Tamil, they can be explained by imposing constraints on the operation of the rule; in a few isolated cases they may be due to analogy. In the case of Kannada and Telugu, they are due to other developments that took place at the later stages of these languages. In Tamil, verbal nouns (i. e. nouns derived from verbs) are not affected by the rule. We have to state the constraint that the rule does not operate in the derivation of verbal nouns from the underlying verbs and also in the inflection, for example *ket-a* infinitive, *ket-a:-tu* ‘it will not be spoiled’ from *ket-u* ‘to be spoiled’; *per-a* infinitive, *per-a:-tu* ‘it will not obtain’ from *per-u* ‘to obtain’.<sup>6</sup>

In Malayalam, unlike in Tamil, the verbal nouns are in some cases affected by the rule. Examples for verbal nouns.

- (i) Ta. *kol-ai* ‘murder’, Ma. *kul-a* < *kol* ‘to kill’ (1772)
- (ii) Ta. *kot-ai* ‘giving away as a gift’ < *koṭu* ‘to give’ (to 3rd person). (1708).

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<sup>6</sup>. Burrow (1968 : 25) says: “Here, as naturally to be expected, either the change did not take place, or having taken place, was effaced by the influence of primary forms which correctly retained the *o*.”

- (iii) Ta. *cey-al* ‘action’, *ceyy-al* ‘conduct, work’. Ma. *cey-al* ‘action’ < *cey* ‘to do’ (1628)
- (iv) Ta. *cel-avu* (inscriptional *cil-avu*, 8th century A.D.) ‘going, expense’ Ma. *cel-avu* ‘expense’ < *cel* ‘to go’ (2286)
- (v) Ta. *cer-al* ‘hatred’ < *cer-u* ‘to hate’ (1329)
- (vi) Ia. *pey-al*, *pey-alai* ‘rain’ < *pey-* ‘to rain’ (3610)
- (vii) Ta. *tok-ai* ‘assembly, collection, total’. Ma. *tuk-a* < *tok u* ‘to assemble, collect’. (2861).
- (viii) Ta. *por-ai* ‘burden, load’, *por-a:-mai* ‘jealousy’. Ma. *por-a:y-ma* ‘impatience’ < *por-u* ‘to bear, endure’ (3729)

A few nouns and verbs are also not affected by the rule mainly in Tamil (and rarely in Malayalam). All these are explainable as retentions due to analogy.

- (i) Ta. *peyar*, (inscriptional) *piyar*, *pe:r* ‘name’. Ma. *peyar*, *piyar*, *pe:r* (3612, the contracted form *pe:r* might be responsible for *peyar* to be more common than *piyar*).
- (ii) Ta. *petai* ‘female of birds’, *pet̪ai* ‘female of animals and birds, woman, girl’. Ma. *pet̪ta* ‘female of birds, female of asses and camels’; *piṭa* ‘female of birds, female of deer’; *peṭa* ‘hen’ (3608(b); analogy with the related words is responsible here).
- (iii) Ta. *peyar* (-*pp-*, -*tt-*) ‘to discharge’ (3610); analogy with *pey* (-*v-*, -*t-*) is responsible here.
- (iv) Ta. *toṭakku*, *tuṭakku* ‘to catch hold of, tie’, n. ‘tying’; *toṭar*, *tuṭar* ‘to follow uninterruptedly’. Ma. *tutar* ‘to be linked’; n. ‘chain’. (2865, analogy with *toṭu* ‘to touch’ is responsible here).
- (v) Ta. *toṭaṅku*, *tuṭaṅku*, *toṭakku*, *tuṭakku* ‘to begin’ Ma. *tuṭaṅnu* (2866, analogy with *toṭu* ‘to begin (tr.)’ is responsible here).

(vi) Ta. *tolai*, *tułai* 'to perforate, bore', n. 'hole'. Ma. *tułay-* 'to be perforated', *tułe-* 'to perforate' (2907; analogy with *tol* 'to perforate' is responsible here).

(vii) Ta. *tolai* (-v-, -nt-) 'to perish'; (-pp-, -tt-) 'to destroy'; *tulai* (-v-, -nt-) 'to perish'; caus. (-pp-, -tt-). Ma. *tulay-* 'to die', *tule-* 'to consume, finish' (2900)

A look at the Kannada index in *DED* shows that there are many word in which *i/u* is followed by *-a*.<sup>7</sup> In some of the cases, there are variants with the normal *e/o* (before *-a*). In others, the derivative *-a* varies with *-i* or *-u* and therefore, the former seems to be a later development.

Examples. *iđe*, *eđe*, *eđa* 'place' (368); *iruł*, *irału*, *irału*, *irłu* 'night' (2102); *ime*, *eme*, *eve* 'eyelash; eyelid'; *cimułu*, *civału* *civułu* 'to twinkle or wink with the eyes' (2097); *ugi*, *uguł*, *uga*, to spit' (547); *kural* 'to cry, shout', *koral*, *korał*, *korlu* 'sound, voice', *koralcu* 'to call or cry.out' (1411); *kołaga*, *kuļa* 'a measure of capacity = 4 bałłas' (1517); *guđasu*, *guđisu*, *guđsu*, *guđiyisu*, *guđis* 'to sweep' (1567), *gubaru*, *guburu* 'thickness, crowdedness' (1449); *jigału*, *jigate*, *jibatu* 'stickiness, gum', *jigi*, *jibi*, 'gum, *cigil*, *jigil* 'to be sticky' (2053); *tiruł*, *tirału*, *tirułe*, *tiłalu*, *tiłlu*, *terale* 'pith, pulp' (2660); *tuvata*, *tovara*, *tovału*, *togari*, *togału*, 'astringent' (2756); *tuđige*, *tuđage*, *tuđuge*, *tođage*, *tođige*, *tođuge*, *tođa*, *tođavu*, *to:đa* 'certain clothing or dress, an ornamen', (2867); *piđaga*, *piđagu*, *piđugu*, 'trouble, affliction, disease' (3416) *puļu*, (> *huļu*), *puļa* (> *huļa*) 'worm'. (3537). Sreekanthaiya (1935 : 780-781) points out that the forms without mutation are only found in modern substandard dialects but not in earlier literary

<sup>7</sup>. D.N. Shankara Bhat (.964) has pointed out such cases after initial *c- /j-*. In view of other examples, his claim (p.18) that the preceding *c-/j-* conditions this is untenable.

works. He says (p.781): "these non-mutations forms are not substantiated by any quotations from literary works. The oldest literature in every case only records the standard form with the mutation. At best, *i/de*, etc, can only be local variants confined to the speech of a few individuals of probably Tamilian extraction or connection". One must be skeptical about Sreekanthaiya's suggestion that such forms may have to do something with Tamil because even Tamil is affected by this process in its later stages. In some cases, the derivative *a* is clearly a later development, e.g. Mod. Ka. *giḍa*, Old Ka. *giḍu* 'a small tree' (1613)

In modern Telugu, original *u* and *a* of the second syllable change to *a* and *u* respectively when followed by *a* and *u* respectively in the third syllable. Due to the operation of this vowel harmony, modern Telugu contains sequences of *i/u* followed by *-a*, e.g. *cilaka*, 'parrot' < *ciluka*; *inapa* 'of iron' < *inūpa*; *isaka* 'sand' < *isuka*; *kuraca* 'short' < *kuṛuca*; *muḍata* 'a fold' < *muḍuta*; *uḍata* 'squirrel' < *uḍuta*, *mudara* 'ripe' < *mudura*.

In Kota and Koḍagu the rule is regular. In Toda also mostly *e* and *o* are found before *\*-a* but between *p-/m-* and *\*-a*, Ta. Ma. *u* is represented in Toda by *i*, (see pp. 96-98) In this case, then, the lowering of the vowel has not taken place in Toda.

15. 1.6. The situation in Tuṇu is not yet entirely clear because the available dictionaries do not indicate the regional and social dialects from which the words are taken. William Bright (1966 : 315) says that before *\*-a*, the Brahmin dialect contains the mid vowels and the common dialect contains the

high vowels.<sup>8</sup> Although this rule holds good in the majority of the cases, there are some words in the Brahmin dialect which show the high vowels before \*-a, as noted by Bright himself. The common dialect, on the other hand, consistently shows only the high vowels before \*-a. Therefore, the Brahmin dialect, which shows both mid vowels and high vowels (in different words) should be investigated in detail. The situation is complicated not only by loans from Kannada (with e/o before \*a) but also by the fact that Brahmins use both the dialects in different situations, i.e. their own dialect among themselves but the common dialect when they speak to people of other castes.

As far as the available evidence goes, Shankara Bhat's (1966a : 18-20) claim that Tuṇu is not affected by i/e and u/o alternation cannot be maintained in the case of common Tuṇu because it shows only high vowels. His statement seems to be true on the whole in the case of the Brahmin dialect (although he does not make such a distinction between the two dialects in the examples he gives). I have checked the forms

<sup>8</sup>. "But even after possible Kanarese loans are eliminated from consideration, Männer's data still show both high and mid vowels; as in *bule-* ~ *bole-* 'ripen' (Ta. *vilai*, Ka. *bele*, Tuṇu here shows rounding after the initial labial). Presumably such doublets reflect dialect differences, but these are not explained by Männer. My own data from Tuṇu informants suggest that it is a difference in social dialect which is involved, and specifically that the forms with mid vowels are characteristic of the Brahmin dialects, while the forms with high vowels are characteristic of non-Brahmin speech. Examples are Br. *kelanji* 'a fly', NBr. *kilenji*; Br. *oleyi* 'inside', NBr. *ulayi*, Br. *bole-*, 'ripen', NBr. *bule-*. But there are also cases where both Brahmin and non-Brahmin dialects have a high vowel, as in *ire* 'leaf' (Ta. *ilai*, Ka. *ele*), and fresh fieldwork will be necessary before the developments are clarified."

with K.V. Jalajakshi, a native speaker of Brahmin Tu<sup>ṇ</sup>u and she has helped me to distinguish between the forms of the two dialects. The following examples from the Brahmin dialect seem to indicate that this dialect has high vowels in cases where they are original and has mid vowels in cases where they are original.

A. (i) *tiga* 'honey' : Tu. *ti:ku* 'tasteful, savoury', *ti:pε* 'sweetness, sweet' (2674(a); see example 771).

(ii) *puna* 'corpse' (< \**piŋ-am*) : Te. *pi:nūgu*. (3420)

(iii) *pida* 'outer', *pideyi*, (C) *pida:yi* 'out, outside, abroad': Ta. *puŋam*, *puraŋ* 'outside', *piŋitu* 'other thing', Ma. *puŋam* 'the outside' west', Ka. *poŋa*, *poŋagu*, *poŋage* 'outside', *peŋa* 'outer place, other side'. Te. *peŋa* 'other' (3554). Ta. *piŋ-itu* and DED 3452 \**piŋ* 'back (with which this is related) show that \*i is original here).

(iv) *gumeli* 'to burn inside, have heart-burn' : Te. *kumpu* 'to become charred', *kum-uŋu* 'to burst with distress'. Te. *kum-ulu* (1460).

(v) *mudepu-* 'to plait, braid, knit' : *mude-* *mudevu-* 'to be folded, get entangled'; *mude* 'screen made of coconut leaves' Te. *mud-ucu* 'to braid', *mud-uta* 'plait, coil' (4036).

(vi) *mura* 'precious stone': Ta. *mu:r-i*, *mur-ippu* 'hump' (4074).

B. (i) *pogε* (C. *pugε*) 'smoke' (< \**pok-ay*; example 766)

(ii) *podepu-* (C. *puðepu-*) 'to quarrel, winnow' (< \**pot-ay*; cf. Te. *pod-ucu* 'to fight', *po:tū* 'battle'; 3493).

(iii) *podepu-* (C. *puðepu-*) 'to cover, put on clothes' (< \**pot-ay*; cf. Ta. Ma. *pottu* 'to bury, cover'; 3686).

(iv) *togali* (C. *tugali*) 'skin' (< \**tok-al*, cf. Te. *tokka* 'rind' 2937; example 579).

(v) *odepu-* (C. *udepu-*) 'to break. (tr.)' (< \**oṭ-ay*; 799; example 756).

(vi) *beralī* (C. *birelī*) 'finger' (< \**ver-al/al-*, cf. Kol. *vende*; 4436)

(vii) *bołantye* (C. *bulante*) 'unboiled rice' (< \**veł(l)* 'white'; 4524).

(viii) *mołe*, *mołike*, *mołekę* (C. *mule*) 'bud, sprout, shoot' *mołepu-* (C. *mulepu*) 'to sprout' (< \**moł-ay*; cf. Ka. *moł-iķe* 'bud, sprout'; 4100).

(ix) *begari* (C. *bigari*) 'perspiration' (< \**vey-ar*, cf. \**ve:-* 'to be hot'; 4516 & 4540).

Such words as (B.) *neraļi* (C.) *nireli* 'shade' (3046; cf. Ta. *ni:l-al*), (B.) *oraļi*, (C) *ureļi* 'mortar' (560, cf. Ta. *ur-iñcu*, *ur-o:cu*, *ur-o:ñcu* 'to rub', 572), (B) *nela*, (C.) *nila* 'earth' (3044; cf. \**nil* 'to stand', 3043) pose a problem at first sight because high vowels are original in these; but they (at least the Brahmin forms) may be loans from Kannada. The Brahmin Tuļu evidence, then, may be used in finding out the original vowel in cases where it is not otherwise possible, if we are sure that it is not a loan from Kannada; for example, B. Tu *irε* 'leaf' (423), *iłε* 'thread' (429), *niñε* 'wick' (3036), *koraļi* (C. *kurali*) 'ear of corn' (1478) and *kelañji* (C. *kileñji*) 'house fly' (1310 & S 217). A detailed study in this direction will be much fruitful.

## 15. 2. Lowering of high vowels in Gonđi-Kuwi.

15. 2.1. Recently Krishnamurti (1976a : 144-145) has brought to the attention of scholars the lowering of high vowels (before \*-a) in the Gonđi-Kuwi group of languages also as

in many of the South Dravidian languages and Telugu. In these languages, only *e* and *o* (but not *i* and *u*) occur before \*-*a* of the next syllable when there is an originally single consonant in between. Further, in some of the Gondi dialects (i.e. the northern ones like that of Betul and in Muria See pp. 148–150) and in Kui-Kuwi, we find the change of Proto Gondi-Kuwi \**e* and \**o* to *a* before the derivative \*-*a*; the changes in the two areas, though similar, are independent of each other. In Kui-Kuwi two the *a*'s contract into a long *a*: when they come together due to metathesis or loss of intervening \**v* (in these two languages, the rule \**e*/*\*o* → \**a* has served as a feeding rule to the rule of vowel contraction. i.e. \**a*+\**a* → *a*:, which is even otherwise required). The order of these changes, then, is something like the following:

Proto Go.-Kuwi { \*<sup>e</sup>  
                  { \*<sub>o</sub> } C-\**a* → Proto-Kui-Kuwi \**a*C-\**a* →  
Kui-Kuwi (C)*a*:

15. 2.2. There is some discrepancy in Krishnamurti's explanation of the Kui-Kuwi developments. According to him (*loc. cit.*), metathesis or loss of intervening consonant operated first and then \**e*/*\*o*+\**a* contracted to \**e*:/*\*o*:, which later changed to *a*: in Kui-Kuwi. Krishnamurti attempted to account for this anomaly by assuming that the \**e*:, \**o*: that resulted from the contractions are phonetically opener than the corresponding PDr. vowels: "... it appears that *e*: < \**e*C-*a*, *o*: < \**o*C-*a* were qualitatively different from the underlying long mid-vowels \**e*1, \**o*: at the allophonic level in pre-Kui, perhaps, somewhat opener inducing the sound change [ *e* ]C- *a* → [ *ε* ]."

(*loc. cit.*, p. 145). No supporting evidence is available either in Kui-Kuwi or in the sister languages for the assumption

that the mid vowels resulting from such contractions (even when *a* is involved) are different from original mid vowels. The Kui-Kuwi data can be more satisfactorily accounted for by assuming that the change  $*e/*o \rightarrow a$  antedated metathesis or loss of intervening consonant, which brings about the contraction of the two *a*'s; the evidence of northern Gondi dialects (12. 4.) offers good support for this assumption. For instance, in example 617, Kui *sa:ru*, Kuwi *ha:ru* <  $*cavar$  <  $*covar$  > Konḍa *so:ru*, Pe. *ho:r* (the contractions in the two groups must have taken place independently of each other). Similarly, Kui *mra:du*, Kuwi *mra:lu* <  $*malal$  <  $*molal$  >  $*moral$  > Konḍa *morol*, Pe. *mro:l* (example 14 below). In most of the cases, metathesis or loss of  $*-v-$  affected individual languages but not larger subgroups and thus there are differences among languages in the matter of lexical implementation of these processes. Therefore, the explanation proposed here cannot be disputed on the grounds that it separates Kui-Kuwi from the other languages in the matter of operation of metathesis or loss of  $*-v-$  without thus positing a uniform proto form with contraction for all the languages, Kui-Kuwi and Pengo-Manda (and Konḍa). Krishnamurti's explanation, which posits a uniform reconstruction with contraction for Proto Konḍa-Pengo-Manda-Kui-Kuwi, suffers from the unnaturalness that only in Proto Kui-Kuwi but not in the others the contracted vowels are openers than PDr. *e:* and *\*o::*. Once the contracted vowels merge with PDr. *\*e:* and *\*o::* at an earlier stage, it is impossible for the former to develop allophonic differences that distinguish them from the latter at a subsequent stage.

Finally, it may be pointed out that since the change under discussion is a very common assimilatory process (i.e. high vowel becoming a non-high (i.e. mid or low) vowel before the low vowel *a*), its presence in South Dravidian and in Telugu-

Kuwi does not necessarily indicate any special genetic connection between these two subgroups.

Examples:

1. Kui *gra*:- (*gra:t-*), (P.) *gre*:- (*gre:t-*) 'to scoop up' : Konda *ker*- (*t-*). Kuwi (F.) *gre*- (*gret-*). (S 290).
2. Go.(M.) *leke* 'silk-cotton tree'. Konda *le:ka maran*, Kuwi. (Su.) *le:ko*, (Mah.) *da:kangi* : Ta. Ma. *ila(vam)*. Ka. *elava*. (421)
3. (= 778)
4. Go. (A) *rey*-, *ray*-, (Tr.) *ragg*- 'to descend'; caus. (Tr.) *reh*- *rags*- . Kui *ja*:- (*ja:t-*) 'to descend, n. descent'; caus. *ja:p*- (*ja:pt-*) < \**at-a* < \**eł-a*/\**ił-a* (439; cf. Ta. *iłanku* 'to decend').
5. Go. (Tr.) *kili*:- 'to weep loudly (e.g. of a child)'; (M) *kil*- . Kui *kla*:- (*kla:t-*) 'to crow, coo, lament' : Ta. *cilai* 'to sound, roar'. (1311)
6. Kui *kra*:- (*kra:t-*) 'to cut' : Ta. *kułai* (-*tt-*) 'to cut reap' *kułu* (*kułł-*) 'to pluck'. (1544)
7. (= 761)
8. (= 617)
9. Go. *tari*:- 'to open', (Ma.) *teR*-, (Koya) *terr*-, (SR) *reh*- : Konda *re:/tere*- . Pe. Mand. *je*:-, Kui *da*:- . Kuwi *de*'- : Ta. *tira*. Ka. *tere*. Te. *teracu*. (2667)
10. (= 765)
11. Konda *por*- 'so sell'. Pe. *pro*- . Mand. *pre*- . Kui *pra*:- . Kuwi (F) *pra*:- . (S) *prah*'- . (Su.) *pra*'- . (3255; it is not certain that these "sell" words are related to the "spread" words like Ta. *para* in this entry).
12. Go. *pare:k* 'husked rice', (A) *pere:k*, (W) *paraik*. Konda *per* (pl. *perku*) Pe Mand. *preyi*. Kui *pra:u*; *pra:ma* 'a grain

of boiled rice' (3286; cf. Ta. *perukkal* 'rice', *parukkai* 'single grain of boiled rice').

13 (= 1035)

14. Go. *malo:l*, (A) *mollo:l*, (W,M) *molol* 'hare'. Konda *morol*. Pe. *mro:l*. Kui *mra:du*. Kuwi (F) *mra:lu*, (S) *mra:lu* (< \**molal* < \**mulal*; \**molal* further changed to \**malal*, which yielded the *a*-forms; cf. Ta. *muyal*, *mucal*. Ka. *mola*, *mala*. Kur. *muñ:yã*. Malt. *munye*. Br. *muru:*; *l* > *r* through dissimilation in Pe. and Konda; 4071)

15. Go. (Ph.) *maronj* 'bark'; (Tr.) *maro:nj*; (Ch.) *maro:j* 'fibre for rope'; (Mu.) *moros*, *maros*; (Ma.) *moros* (M) *moras*; (Ma.) *moroli*, (Koya) *mo:ru:m*. Kui. *mra:su*. Kuwi (T) *marcu*, (4079; cf. Ta. *muračci* 'a cord').

16. Go. *marhu-* 'to paint cattle'. Konda *miris-* 'to rub and clean utensils with ashes, etc.'. Kuwi (S.) *mrispi ki:-* 'to polish'. Kui *mra:nd-* 'to plaster, smear'. (< \**mel-(a)*; cf. Ta. *meļuku* 'to cleanse'; 4169).

## Metathesis and aphaeresis

### **16. 1. Metathesis (or apical displacement) in Telugu-Kuwi.**

16. 1.1. The Telugu -Kuwi group of languages (i.e., Telugu, Gondi, Konda, Pengo, Man̪a, Kui and Kuwi) unlike the rest of the Dravidian languages, have a number of words in which alveolar and retroflex consonants occur in the initial position. They also contain consonant clusters (the second member of which is an alveolar or retroflex consonant) in the word initial position unlike the other Dravidian languages. They, therefore, differ from the remaining Dravidian languages in these two respects.

A comparative study of such words in Telugu-Kuwi with cognates in the other languages reveals that the alveolar or the retroflex consonant was originally after the root vowel and that in Telugu-Kuwi it shifted its position and came to the position "before the root vowel". The most comprehensive study of this problem was undertaken by Krishnamurti in his works of 1955, 1961 and recently 1978a (also 1976c). He terms this process "metathesis" (note that K. Ramakrishnaiya (1940-41) has already used this term in explaining this change) in

the former two works but "apical displacement" in the latter one. This problem was discussed earlier by K. V. Subbayya (1909), L.V. Ramaswami Aiyar (1931-32b), and Alfred Master (1948), E.H. Tuttle (1930), and K. Ramakrishnaiya (1940-41); M.B. Emeneau (1945) also touched the problem without going into the details.<sup>1</sup> Ramaswami Aiyar and Master were successful in providing etymologies for a number of forms in Telugu and some other languages of this group and in explaining the development involved to some extent. Ramaswami Aiyar tentatively gave the term 'aphaeresis' to this process in Dravidian although he felt (p. 449) that "the peculiarities and variations characteristic of this phenomenon in Dravidian are such as might necessitate the use of a special terminological unit for the Dravidian change". He clubs together under this term two processes, namely, the loss of the vowel of the initial syllable in Tamil-Malayalam and Tu?u and the process in the Telugu-Kuwi group, which, because of its more complex nature, must be distinguished from the former process. He assumed that in both the cases, the vowel of the initial syllable was lost but in the latter case "the vowel of the original second syllable is adapted or assimilated (in character) to the vowel undergoing Aphaeresis" (p. 449).<sup>2</sup> The reason for this change, according to him, is accent displacement, i.e. "a redistribution of

<sup>1</sup>. "Subbayya refers to them (i.e. these developments) as "The Law of vowel-lengthening", Tuttle as stress-displacement, often accompanied by sound displacement or a change of vowel length, Ramaswami Ayyar as accent-shift and aphaeresis of the initial syllable, and Ramakrishnayya as metathesis, assimilation and syncopation. Neither Tuttle nor Ramakrishnayya has gone further than naming the processes. Subbayya has, however, analysed them and formulated rules and Ramaswami Ayyar has surveyed the field of aphaeresis and syncope in a number of Dravidian languages." (so Alfred Master 1948 : 341)

<sup>2</sup>. He justifies this by saying (P. 466) : "These two varieties are not different essentially, inasmuch as the features involved

accent resulting in an increase of accent in the original second syllable and a conspicuous decrease in the first syllable" (p. 471). He considers the following two factors to be responsible for this accent displacement. (1) Addition of formative elements to the root and (2) the presence of the liquids *l* and *r* in many words that undergo this process. For the first, he illustrates from Kui; in *pre:n̥da* 'paternal uncle' the change occurs because there is a "conspicuous formative element" but it does not occur in the related word *pe:ro* 'paternal aunt' because it does not contain a consonantal formative element; similarly there are two variants for the word 'ear' in Kui, namely *kiru* and *kriu* but the plural of both is *kri:-ka* which invariably shows aphaeresis because there is an additional consonant in it. Regarding the second factor, he observes (p. 476): "For reasons all of which we cannot now clearly define, in Kui and Telugu there was a strong redistribution of accent which caused a disturbance of the normal rule of Dravidian accentuation, viz., that the radical syllables carried with them the primary accent; but this redistribution appears to have occurred mainly in connection with syllables containing *l* and *r*. The effort to preserve and define the articulation of medial *l* and *r* which in unaccented positions tend to coalescence and disappearance, appears to have led to the transference of the primary accent of the words from the initial syllables to those with *l* or *r* and thence to the gradual disappearance of the vowels of the initial syllables."

Earlier to Ramaswami Ayyar, Subbayya also attributed the change in Telugu to accent shift. Subbayya's law of vowel in each of them are fundamentally alike except for the vowel assimilation characteristic of the second variety of each type. In both varieties, the change takes place before *r* or *l* chiefly; and in both we find instances of the lengthening of the vowel of the original second syllable. We shall, therefore, not be justified in refusing to recognise their probable intimacy of relationship in origin and occurrence".

lengthening is as follows: "When in a primitive Dravidian polysyllabic word or any word where the vowel of the second syllable is separated from that of the first syllable by any one of the liquids *r*, *t*, *l*, *ɻ*, and *ɭ*, the accent falls on the vowel of the second syllable, then in Telugu the vowel of the second syllable is first assimilated to the vowel of the first syllable (in the prehistoric period) and then < by the accent shifting on the second syllable > is lengthened with simultaneous dropping of the unaccented vowel of the first syllable." ("The portion in angular brackets is added in a later restatement" – so Alfred Master 1948 : 341).

Alfred Master (1948 : 341–342) questioned the hypothesis of accent-shift or stress displacement saying that a specific cause must be pointed out for such displacement of stress and that "it is unnecessary to resort to stress displacement to account for the change" (p. 342). But he himself later talked about the transfer of prominence of the first syllable to the second and named the process "proenthesis" without any further explanation: "The Telugu [process, however, differs from epenthesis in that it is progressive and not regressive and the prominence of the first syllable is transferred with its vowel to the second. Further, it is not confined to the vowels *i* and *u*, but includes *a* and, apparently, though this must be left for the present an open question, *e* and *o*. As a convenient *ad hoc* term we may name it Proenthesis". (p. 342)

As has been observed earlier, Krishnamurti's detailed study of this phenomenon is a remarkable advance in the study of comparative Dravidian phonology. He has succeeded in analysing and classifying the material in the seven languages of the Telugu-Kuwi group and made significant observations on the origin and spread of this process in this subgroup. What follows is based essentially on his study.

16. 1.2. As noted by Ramaswami Aiyar (1931-32b) and Krishnamurti (1978a) apical displacement takes place only when the root syllable contains a short vowel and a retroflex or alveolar consonant (except \**n*; see also 16. 1.6) as C<sub>2</sub> and is followed by a derivative element. The second condition is very important since apical displacement does not affect free roots (e.g. \**pal* 'tooth' (3288), \**ka:l* 'leg' (1238) and roots with a long vowel, a long consonant or a consonant cluster even if it is followed by a vowel, which, however, is possible only in nominal stems (e.g. *ku:l-i* 'paddy' (S 278), \**put̪t-(i/am)* 'anthill' (3566), \**apn̪t-i* 'pig' (3326). This process cannot be said to be regular because in each language, there are cases in which apical displacement has not taken place although the conditions required are present (e. g. Te. *erūgu* 'to know', *perugu* 'to grow', *adāgu* 'to be subdued', etc). Individual cognates that are affected by this process in all the languages of the Telugu-Kuwi group are extremely rare.

16. 1.3. Although the process of apical displacement is present in all the languages of the Telugu-Kuwi group there are nonetheless contain important differences among them, which will be pointed out below. In view of these differences, it has been suggested by Krishnamurti (1961:51) that the tendency started in Proto-Telugu-Kuwi just before its disintegration and that it was carried out in each language in its own way. Originally only a small number of items were affected by this process, but later it gradually spread to more and more lexical items in each language or language group.<sup>3</sup>

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<sup>3</sup>. Cf. "In this paper I have attempted to show that the rules of apical displacement can be traced to a common stage of sub-group<sup>2</sup> (i.e. Telugu-Kuvi) of the Dravidian languages, including Telugu. At that stage only a few lexical items, were affected by change. The rules inherited through the shared items got further generalized and continued to operate through successive splits of the sub-group into independent languages,

16. 1.4. As far as Telugu is concerned, the rules for apical displacement are as follows. It operates in words that originally began with a vowel or one of the consonants ( $C_1$ ) \**k* (> Te. *k*, *g*) \**c* (> Te. *s*), \**t* (> Te. *t*, *d*), *p*, *m* and \**v* (> Te. *v*, *b*). If  $C_1$  is present in a word, apical displacement operates only when  $C_2$  is one of the consonants \**r*, \**t̪* and \**l̪* (in literary Telugu, all of them become *r* in this position).<sup>4</sup> If  $C_1$  is not present,  $C_2$  can be \**t̪*, \**l̪* or \**l̪* in addition to \**r*, \**t̪* and \**l̪* (some other consonants also can occur in this position, particularly in pronouns; see 16. 1.5.). Through apical displacement ( $C_1$ )  $V_1 C_2 - V_2$  becomes ( $C_1$ )  $C_2 V_1 V_2$ . The sequence of two vowels is avoided by dropping the  $V_2$ , which can only be *i*, *u* or *a*.<sup>5</sup> If  $V_2$  is *a*, which is also dropped, the root vowel (*a*, *e* or *o*; note that \**i* and \**u* before *a* have already merged with \**e* and \**o* respectively before the time of apical displacement) is lengthened provided that it is not followed by a consonant cluster.

affecting more and more lexical items ... The areal diffusion of a sound change is interpreted here as the lexical spread of an inherited rule in genetically and geographically contiguous languages." (Krishnamurti 1978a : 18)

<sup>4</sup>. In early Telugu inscriptions, *l̪* occurs upto the 11th century in initial as well as medial positions. However, even during this period, there are forms in which it is replaced by *d* or *r*, which are its regular reflexes in the later stages (see chapter 37). Examples for *l̪* : *laccina* (var. *alisina*) 'that destroyed' (7th A.D.), *laccu* (7th A. D.) 'that destroys' *lulla* 'name of avillage' (> Mdn. *lolla*; 11th A.D.); *lendulu:ra* 'in the village' *lendulu:ru* > Mdn. *dendulu:ru* (7th A.D.); *klocce/klo:ce* (8th A.D.)/, *krocce* (10th A.D.) 'he engraved'; *plakki/palaki* 'name of a district" (7th A.D.). *l̪* in the initial position, which later becomes *l*, occurs in inscriptions in words like *lo:na* 'in, inside' (later *lo:na*, 9th-10th A.D.). The *r* in the initial consonant clusters is well preserved in the literary Telugu but that is dropped in modern Telugu.

This change must have started in the spoken language around 7th century A.D. itself as evidenced by inscriptional

16. 1.5. Gondi has word-initially *r* (< \**r*, \**t*, \**l*), *l* (< \**l*, \**l*) and *d/r* (< \**t*, \**l*); when \**l* comes to the initial position through metathesis, it changes to *r* in the northern and western dialects but to *l* in the southe-astern dialect (Koy :), see examples 778 and 784. Burrow and Bhattacharya (1960:77-78) think that N.W. *r* < \**r* < \**l* (i.e. the development in this position was originally identical with that in the intervocalic position). Although it has no consonant clusters in this position there is evidence in a few cases for the presence of such consonant clusters at an earlier stage (Krishnamurti 1978a:4). The first consonant in such clusters has been deleted later.

Konda has word-initially *d* (< \**t*), *r*, *l* (< \**l*, \**l*), *r* < \**l* \**l* and *t*; it has word initial consonant clusters only dialectally involving *r*, *r* and *t* as a second member.<sup>6</sup>

usages like the following, which, however, are very rare: *ayyavo:lu* (7th A.D.) name of a place in which -*vo:lu* is the variant of *pro:lu*, *pulo:l(u)*, *plo:lu* 'a town'; *gocci* 'having pierced, penetrated' (9th-10th A.D.) var. of *grocci*, *pappu* 'split pulse' (11th A.D.) var. of *prappu*, in *nandiga:ma* 'name of a place' (10th A.D.) -*ga:ma* < Skt. *gra:ma*- 'village' (K. Mahadeva Sastri 1969:48, B. Radhakrishna 1971: 1xxix). Evidently, forms with this change were considered to be substandard and not accepted by poets. In Modern Telugu the verb *ra:yu* 'to write' < Old *vra:yu* is the only case where the *r* is retained but the preceding consonant is lost contrary to the normal development.

5. In a very few instances like the following,  $V_1$  is dropped instead of  $V_2$ .

Kui *mri:enju* (pl. *mri:ka*) 'son'; (K.) *mrienji*. Kuvi (S) *nri esi*. Mand. *ta:-mji* (< \**ta:-mati*) 'his son' : Ta. Ma. *mari* 'young of sheep' (Go *mari*: 'son' (3901; Kuvi (F) *miresi*. (Su.) *nir'esi* are probably derived from \**mrl'esi* through metathesis operating for the second time).

In his recent paper (1978a:18) Krishnamurti agrees with Tamaswami Aiyar to some extent and says that "both metathesis and the location of stress in terms of syllable weight

Pengo, Manda, Kui and Kuwi have word-initially *d*, *r*, *r* and *l*. They also have word-initial consonant clusters containing *r* and *r* (*< \*l*, *\*l*) as second members; Kui and Kuwi additionally have word-initial consonant clusters also with *l* (*< \*l*, *\*l*) as the second member.<sup>7</sup> In Pengo and Manda there are a number of cases in which the original word initial consonant clusters have been simplified by deleting the first member.<sup>8</sup>

operated in complementary environments to produce the sound changes in question." The second syllable, according to him, carried stress only when  $V_1$  and  $V_2$  were of the same quality or when  $V_2$  was *a* (which later became assimilated to the root vowel *e* or *o*); in such cases  $V_1$  is lost and  $V_2$  is lengthened. When  $V_2$  is not identical in quality with  $V_1$ ,  $V_2$  is lost.

<sup>6.</sup> According to Krishnamurti (1969 c: 21-22) the Sova dialect has word-initial consonant clusters; e.g., *g̱o:nū* 'hill' (other dialects *goṇon*, *goṇo*); *mra:nū* 'tree' (*maran*, *mara*); *p̱e:l-* 'to 'explode' (*perel*).

<sup>7.</sup> The Kuwi dialect of Sunkaramēṭṭa has word-initial clusters with *n* as the second member in the following cases.

- (i) Kuwi (T) *m̱i:ya* '*Anogeissus latifolia*': Pe. Mand. *miṇiya* (S 785)
- (ii) Kuwi (Su.) *pe:nu* (pl. *p̱ne:ka*) 'louse' < \**pe:n*. (3643)
- (iii) Kuwi (Su.) *m̱ih-* (*m̱ist-*), *m̱is-* 'to lighten': Ka. *miṇaku*, *miṇuku* 'to glitter' (3994)
- (iv) Kuwi (Su.'P.) *mi:nu* (pl. *m̱i:ka*) 'fish' < \**mi:y*. (3999)  
Also see example 808.

<sup>8.</sup> Regarding Pengo, cf. Burrow and Bhattacharya (1970:23): "Certain words beginning with *r-*, *r-*, *l-* have lost an initial consonant, which came to be the first of a consonant group as a result of metathesis, and was then elided. The consonants dropped in this position were *n-*, *v-* and *s-* (which normally becomes *h-*).

## Examples:

775. Ta. *aṭaṅku* 'to be subdued' Ma. *aṭañnu-*. Ko. *arg-*. To. *org-*. Ka. *aḍaṅgu*, *aḍagu*. Tu. (B) *aḍengi-*, (C) *deṅgi-*. 'to be concealed'. Te. *aḍāgu* 'to yield, submit'; *dā:gu*, *dāgu* 'to lie hidden'; *dā:cu*, *dā:cu* 'to hide'. Kol. *da:ṅg-* 'to hide (intr.)', *da:p-*, *da:ṅgip-* 'to hide (tr.)'. Nk. *ḍha:p-* 'to cover, hide'. Konda *da:n-* 'to lie hidden'; *da:p-* 'to hide, save (money)' Kui *da:-* 'to lie in wait for'; *a:r-*, *a:t-* 'to conceal'. Kur. *ark-* 'to knead, shampoo by squeezing from place to place'. Malt. *arg-*, *arges-* 'to press down'; *ark-* 'to thrust or wedge in'. (56 (a); the Kol. Nk. words must be loans from Te.)

776. Te. *ra:lū* 'to fall or drop down (of leaves, tears, etc.)'; caus. *ra:l(u)cu*. Kol. *ra:l-* 'to fall'; (SR) *ra:p-* 'to fell' (< Te.). Nk. *ra:l-* 'to fall out'; caus. *ra:lp-*. Go. *arr-*, *ar-* 'to fall' Konda *ar-* 'to fall'; *arap-* 'to fell'. Pe. *ar-* 'to fall'; *rat-* 'to let fall, drop'; motion *ratka-*; intens. *ratpa-*. Mand, re- 'to fall'; tr. *ret-*. (197).

*ri:ga* 'shade' < \**nṛi:ga* < \**ni:ṛga* (Konda (BB) *ni:ṛga*), *le:nj* 'moon, month' (Go. *nale:nj*).

*rinj-* 'to be white' (Ta. *vel-* etc.), *le:kiñ* (pl. 'strips of bamboo' (Kui *vle:ka*), *re:n(g)-* 'to lie on the back' (Go. *ware:ṅga:nat*), *roy* 'wind' (Ta. *vali*, etc.), *rah-* (*rast-*) 'to be sharp' (Konda (BB) *varts-*).

*riṅ(g)-* 'to be loosened' (Kui *sringa*), *ri:ṅga* 'charcoal' (Kui. *si:ṅga* < \**sri:ṅga*), *re:ka* 'Buchanania latifolia' (Go. *sare:ka*): *rat-* 'to cause (leaves) to fall' (*har-* 'to fall (leaves)', *ra:pi* 'cow-dung' (Go. *sara:pi*:).

Note also the loss of *t-* in *Manda* (cf. example 1005); Burrow(1976:43) observes: "Aphaeresis and metathesis has taken place selectively as in Pengo: cf. *ri:ge* 'shadow', *riy* 'wind', etc. In some cases it has taken place in *Manda* where it has not done so in Pengo e.g. *li* 'to stand' (< \**nli* < \**nil-*) as opposed to Pengo *nil-*, and in the negative verb base *la:-* as opposed to Pengo *hil-*."

777. Ta. Ma. *ili* 'to get down' To, *i:x-*. Ka. *ili*, *ila*, *ilu*, *ili*. Kod *ili-*. Tu. *ili-* *iri-*, *ili-*. Te. *dig(g)u*, *digu*; *diggiya* 'a well with steps descending into it'; *dincu*, *dincu*, *dimpu*, *dimpu*, *digucu* 'to lower'; *dindu* 'to sink, die'. Kol. *dig-*, (SR) *dig-* 'to descend'; *dip-*, *digip-* 'to make to come down' (<Te.) Nk. *digg-* 'to descend; tr. *dipp-* (<Te.). Nk (Ch.) *dig(ul)-* 'to descend', tr. *digup-*. Pa. *ir-*, *irv-*, (S)*iri-* 'to descend'; tr. *ırkip-* (*ırkit-*) Ga. (Oll.) *ırg-* 'to descend'; tr. *irigp-* (*irigt-*). Go. (M. Ko.) *dig-* 'to descend'. Kui *di:-* 'to fall' *dip-* 'to set down' (*d-* here is probably wrong for *d-*). Kuvi *ri:-* 'to fall' (426).

778. Ta. *ila(m)*, *ilai* 'young'. Ma. *ila*. Ko. To. *el*. Ka. *ełatu*, *eładu*, *ełedu*. Kod. *eleē* 'youth'. Tu. (B) *ełatti*, *ełe* 'young', (C) *lattī*, *lambu*. Te. *ela-*, *lē:(ta)*; *le:ma* 'woman'; *lē:ga* 'a sucking or young calf'. Kol. Nk. *le:ńga* (<Te.) Pa. *iled* 'young man'; *ile* young woman'. Ga. (Oll.) *ile* 'bride'; *iled* 'grown-up girl'; *ilend* 'bridegroom'. Go. *raiyo:l* 'adult boy'; *raiya* 'adult girl'; (M) *layor* 'young'; (L) *leyor* 'young (masc.)'; *leya* id. (fem.); (A) *riyyo:r* 'young man'; *riyya:* 'young woman'. Konḍa *le:ńa* 'calf'. Kui *le?ti* 'soft'. Kuwi *liddi*, Kur. *lidum*? Br. *i:lum* 'brother'; *i:z* 'sister'. (436; Kui *la:venju* 'grown-up boy'; *la:a* 'grown-up girl'. Kuwi (F) *ra:\**a 'young woman'; (S) *la:a* 'virgin' (D) *ra'a* 'young woman'. The above words in DED 248 must be shifted to this entry as suggested by Bh. Krishnamurti).

779 Ta. *itai* 'anyone who is great, master, husband, king, supreme god'; *itai(ya)vay* 'chief god'; *itraivi* 'mistress, queen, Parvati'. Ma. *ira:n*, *ra:n* sire, used in addressing princes'. Ka. *eße(ya)* 'master, king, husband'; *ełati* 'a mistress'. Te. *tē:du* 'king, lord, master, husband'. (448)

780. Ta. *ural* 'mortar'. Ma. *ural* 'wooden mortar for beating rice'. Ko. *olka:l* 'mortar'. Ka. *oral*, *orał(u)*, *orlu*, *ollu*. Kod. *ora*. Tu. *oralī*. Te. *ro:lu*. (560).

781. Ta. Ma. *uļu* (*uļut-*) 'to plough'. Ko. *ug-* (*uṛt-*). To. *uſf-* (*uṣt-*). Ka. *uļ*, *uļu* (*uļt-*, *utt-*), Kod. *u:ł-* (*utt-*). Te. *dunnu*. Kol. Nk. *ur-*. Pa. *uṛ-*. Ga. (S) *u:đ-*. Go. (A) *u:r-*, (Ko.) *uđ-*. Konđa Pe. *ru:-*. Kui *ru:-*; *u:r-* 'to dig with the snout, root up'. Kuwi *ru:-*. Kur. *uy-* (*uss-*); *ugta:* 'a plough (share)'. Malt. *us-* 'to turn up the soil (as pigs do)'. (592).

782. Ta. *uļuvai* 'tiger'. Te. *duvvu*. Kol. *duv*, *du:* 'panther' (<Te.). Pa. *du:* 'tiger' (<Te.). Go. (A) *ruvvāl* 'panther'; (Ko.) *duv*. ?Ga.(S) *đucca:* 'wolf'. (596).

783. Ta. *uļai* 'deer'. Ma. *ula-ma:n* 'porcine deer'. Ka. *duppi* 'the spottet deer with branching horns, the axis' (<Te.). Tu. (B) *uļe*, (C) *ure*, *ule* 'deer'.] Te. *duppi*. Kol. *đuppi* (<pre-Te.). Pa. *uṛup* 'spotted deer'. Ga. (P) *đuppi*. (<pre-Te). Go. (A) *duppal*; (S) *duppi*. Konđa *đupi* 'axis deer' (598).

784. Ta. Ko. *uļ* 'inside'. Ma. *uļlu*. To. *uŁ*. Ka. *uļ*, *oļ*. Tu. *uļa*. Te. *lo:nu*, *lo:(pala)n*, *lo:na(n)*, (inscr.) *lo:na*; *lonigu*, *lö:gu*, 'to yield' *lö:kuva* 'subordination'. Kol. *lo:pal* 'inside' (<Te.) Nk. *lo:pa* (<Te.) Pa. *ole(k)* 'house'. Ga. (Oll.) *ule*, (S) *ullen*. Go. *ro:n*, (M Ko.) *lo:n*. Kur. *ula:* 'inner room' Malt. *ule* 'inside'. (600)

785. Ta. Ma. *eļupatu* 'seventy' Ko. *eļvat*. Ka. *e:łpattu*, *eppattu* Kođ. *ēļuvadī*. Tu. (B) *eļpa*, *e:łpa*, (C) *erpa*. Te. *đebbadi*, (Mod.) *đebbhay*, *đabbhay*. (772).

786. Ta. Ma. Ka. *ki:ł* 'place or space below'. Ko. To. *ki-* 'lower,' Kođ *ki:-*, *ki:łi* 'lower, below'; Tu. *ki:łi* 'base, low, mean'. Te. *kri:-* 'lower, below'; *k(r)inda* 'below, down'; *ki:đu* 'evil, harm, danger'. Pa. *kiři* 'below'. Kur. *kiyyata:* 'beneath, under (postposition, adv.); *ki:ta:*, *kiyyanta:* 'lower, lowermost, humble in rank'; *ki:tanta:* 'low-born'. Br. *ki-*, *ki:-*, *ke:-* 'below, down'; *ke:raG* 'lower side, bottom'. (1348).

787. Ta. Ma. *kuruṭu* 'blindness'. Ko. *kurd*, *ku:r*. Ka. *kuruḍu* *kuraḍu*, *kuddu*, *kuruḍu*. Tu. *kuruḍu*, *kuruḍa*, *kurdu*, Te. *g(r)uḍdi* 'blindness, blind man'. Kol. Nk. Go. *guḍdi*. Malt. *·qoṭri* 'a blind person'; *qoṭr-* 'to become blind'. (1487).

788. Ta. Ma. *kuḍal* 'tube, flute'; *kuḍi* 'hollow, pit'. Ko. *korl*, *koḍa:y* 'tube'; *koł* 'clarinet'; *kuy*, *kup* 'pit'. To. *kwe:L* 'tube, Kota clarinet'; *kuş* 'small valley, ditch'. Ka. *koḍal* 'flute, fife'; *koḍavi*, *koḍave*, *koḍa:yi*, *koḍivi* 'tube'; *kuḍi*, *guḍi*, *kuṇi*, *guṇi* 'hollow, hole, pit'. Kođ. *koḍa* 'flute'. Tu. *koḍave*, *koḍape*, *kolave*, *kola:yi* 'hollow tube'; *kolali* 'fife'; (B) *guli*, (C) *guri* 'pit'. Te. *kro:vi* 'tube, flute'; *g(r)oyyi* 'pit'; *groccu* 'to dig'; (inscr.) *klo:ce* 'he engraved'. Ga. (Oll.) *kurup* 'a well'. Konḍa *kurni-* 'to be hollowed out, make pits'. Pe. *kroy* 'pit, hole, ditch'. Mand. *kray*. Kui. *kro:du* 'tube, quiver'; *kra:u* 'pit, hole'. Kuwl *gra:yu* Br. *xurrum* 'grain-pit'. (1511).

789. Ta. *kuṭu* 'to pound in a mortar, husk' *kuṭtu* 'to pound, strike, hit, crush (as lice)'. Ko. *kur-* 'to pound (clay in preparation for making pots)'. Te. *g(r)uddu* 'to give a blow with the fist'; n. 'a blow with the fist'. (1536)

790. Ta. Ma. *koḷu*, *koḷuppu* 'fat'. To. *kwalp* (l.w.), *kōw*; *kog iṛ* 'old buffalo'. Ka. *korvu*, *korbu*, *kobbu* 'fat'. Tu. *komme*. Te. *k(r)ovvu*, Kol. Nk *koru*. Pa. *kor-*, (S) *korv-* 'to be fat'; *korukuḍ* 'fatness, fat' Ga. *korkuṭ*, *koḍukuṭ*. Go. (A) *korvi:nj* Konḍa *korvu* 'fat of animals'; (B) *koṇes* 'fat'. Pe. *kro:-* 'to be fat'; *korva* 'fat'. Mand. *krūa*. Kui *kro:ga*. Kuwi *korva*. (1784)

791. Ta. *talai* 'head, top'. Ma. *tala*. Ko. *tal* To. *tal*; *tas* superior division of *ti*: dairy', *taṣm* 'top'. Ka. *tale* 'head', Kođ. *tale*. Tu. *tare*. Te. *tala*. Kol. Nk. Nk (Ch.) *tal*. Pa. *tel* Ga. (Oll.) *tal*; (S) *tallu*. Go. *talla*. konḍa *tala*. Kui *tlau* 'head, hair of head'; *tlā:mbcri*, (K) *tlameri* 'hair of head', Kuwi *tra:yu* (2529).

792. Ta. *talal* 'to glow, burn'; n. 'fire'; *tanal* 'live coals'. Ka. *tanalu* 'glowing coals'. Te. *t(r)ampi* 'fire pit, heap of cowdung cakes used as fuel'; *tanuku* 'to burn (intr.)'. Kol. *tari-* '(fire) burns'; *tap-* 'to light (fire)'. Nk. *tar-* 'to catch fire' *tarp-* 'to set fire, to kindle' Pa. *tar-*, *tarv-* 'to be hot'; *tarkip-* 'to heat'. Go. *tarmi*: 'fire'. (2542).

793. Tu. *tanika* 'lungs, liver'; *sanka* 'liver'. Kol. Nk. *tarıngud*. Nk. (Ch) *taŋg*. Pa. *taruŋg*. Ga. (Oll) *tarin* Go. *tana:ki*, (A) *tarra:ki:*, (Koya) *taŋike*. Konða *tarķi*, (BB) also *taŋa:ki*, Pe. *tra:kiñ*. Mand. *tra:keñ*. Kui *tla;da*, *tra:da*, (K) *tra:daŋga*. Kuwi (Su.) *tra'na*, (P) *ta:lلا*. (2546).

794. Nk (Ch) *tirg-* 'to tremble'. Pa. *tir-*, (S) *tirv-, tiri-* 'to tremble'; *tirk-* 'to shudder, to throb (pulse)'. Ga. (Oll). Konða *tirg-*. Pe. *tri:g-: tripka-* (<*trikpa-*) 'to be startled'. Mand. *tri:g-* 'to tremble' Kui *tirg-*; *trikna* 'in a startled manner'; *triki in-* 'to be startled; Kuwi (F) *tri:g-*; (S) *tri:g-*. (2662).

795. Ta. *turu* 'rust, verdigris'; *turucu*, *turuci* 'blue vitriol, rust'. Ma. *turišu* 'blue vitriol'; *turumpu*, *turuvu* 'rust'. Ka. *tukku*. Tu. *tukki*. Te. *t(r)uppu*. (2747).

796. Ta. *pałła*, *palaiya* 'old'. Ma. *pala* 'old'; *palaya* 'ancient, stale'. Ko. *pay-* (before vowel). *pa-* (before consonant) 'old'. To. *pa:w*, *pa:-* (before consonants), Ka. *pala*, *pale*, *hale* Kođ. *pale*, Tu. (B) *pała*, (C) *parati*, *parki*. Te. *prat-* (in cpds.) *prā:ta*, *pa:ta*. Go. *para:na:*, Konða *paray*, (Sova) *pra:yi*. Pe. *pra:n*. Mand. *pra:n(ca)* Kui. *pra:di*; (K) *pra:k-* '(food) 'to become stale'. Kuwi (F) *pra:i* 'old'. Kur. *pacca:*, *pacba:*, *pacgi:*; *pacc-* 'to grow old', Malt. *pace* 'old'; *pacge* 'aged'; *paco* 'old (with reference to animals)'; *pac-* 'to become old'. (3296).

797. Te. *p(r)e:gu* 'entrail, gut, bowel' Kol. *pe:gul* (pl.) 'intestines' Nk. *pe:guł*. Nk (Ch) *pig(g)u*. Pa. *pirul*, *piruvul* (pl.) 'smaller intestines'. Ga. (Oll.) *purug* 'stomach, intestines'; (S)

*puḍḍug* ‘stomach’. Go. *pi:r* (obl *pi:t-*) ‘stomach, belly’. Konḍa (Sova) *pre:nu* ‘bone, intestines’. (3445).

798. Ta. *pori* ‘to be parched, fried’; n. ‘parched grain or pulse’. Ma. *pori* ‘what is parched’. Ko. *poyr-* ‘to parch (grain)’; n. ‘grain parched’. Ka. *puri* ‘to parch’; n. ‘parching’. Tu. *pori-* ‘to be parched’; *poripu-* ‘to parch’. Te. *porāṭu* ‘to fry’; *p(r)əyyi* ‘oven’. Kol. Nk. *poy-* (<Te.). Go. (A) *boṛs-* ‘to roast’; (Ma.) *poṛs-* ‘to fry’. Kui *prond-* ‘to be alight’; *pros-* ‘to light up, ignite’, *bro:ḍ-* ‘to be burned to ashes’, tr. *bro:t-*; *bro:nḍ-* ‘to smoulder, be fanned into flame’, tr. *bro:t-*. Kuwi (F) *pornd-* ‘to be lit’; *prot-* ‘to light’; (S) *prot-* ‘to ignite’. Kui. *porco:, poroc* ‘half cooked, not sufficiently boiled (of grains only)’. (3705).

799. Ta. *polutu, poltu, po:tu* ‘time, opportunity, sun’. Ma. *polutu* ‘sun, time’, *po:tu, po:l* time’; Ko. *port*. To. <sup>v</sup>*püst*, (Töw-fily dialect) *post* ‘time, luck’. Ka. *poltu, portu, pottu, hottu* ‘time, sun’. Koḍ, *polidī, po:dī* ‘the cutting of paddy at the rice-harvest festival’. Tu. *portu* ‘time, sun’. Te. *p(r)oddū*. Kol. Nk. Nk. (Ch) *pod*. Go(A) *po:rd*; (M) *poṛd*. Konḍa *podu*. Pe. *padna/podna* ‘time’. (3724).

800. Ta. Ma. *maram* ‘tree, wood, timber’. Ko. *marm* ‘tree’. To. *me:n*. Ka. Koḍ. Tu. *mara*. Te. *m(r)a:nu, m(r)ā:ku*. Kol. Nk. *ma:k*. Pa. *meri*. Ga. (Oll.) *mar, marin*, (S) *ma:ren*. Go. *mara:, (A) mara:, (Koya.) ma:ra, (Ma.) marnu, ma:rnu*. Konḍa *maran*, (Sova) *mra:nu*. Pe. Maṇḍ. *mar*. Kui *mrahnu, mrakundi, (K)mra:nu*. Kuvi (F) *mratnu*, (S) *mra:nu, marnu*; (Su) *ma:rnu, (P.D.) mara*. Kur. *mann*. Malt. *manu*. (3856).

801. Ta. *muļañku* ‘to roar, thunder, make loud noise’; *muļakkam* ‘loud noise’; *muļavu, muļa:* ‘drum’; *moli* ‘to say, speak’, n. ‘word, saying, language’. Ma. *muļañnu* ‘to roar’; *muļakkam* ‘a roaring sound’; *moli* ‘to speak’ n. ‘word’. Ko. *moṛv* ‘a child’s continuous crying’, Ka. *moļagu* ‘to roar, thunder’.

n. 'roaring, thunder'. Kod. *moļi* 'subject of talk or song'. Te *m(r)ō:gu* 'to sound, roar'. Kol. *mud-* 'to talk, speak (a language)'. Nk. *muṛ-* 'to speak'. Konḍa *miri-* to speak, utter'. (4092).

802. Ta. *vari* 'to write, paint, draw'; n. 'line'; *varai* 'to write, inscribe, draw'; n. 'line, wrinkle' Ma. *vare-* 'to make lines, write'; *varay-, vari* 'to draw lines'. Ko. *varv-* 'to write'. To. *par-*. Ka. *bare, bari*. Kod. *bare* 'stripe, brand-mark'. Tu. *bare-, baripu-* 'to cut, scratch, write, draw'. Te. *vra:yu*, (mod.) *ra:yu* 'to write'; *vrā:ta* (mod. *ra:ta*)' writing'; *vra:yi* (pl. *vra:lu*) 'letter of the alphabet'. Kol (A) *va:y-* 'to write' Pa. *varc-* 'to scratch'. Ga. (S) *ra:yap-* 'to write' Go. (M). Konḍa *ra:s-* Kui *vri:s-* 'to make an incision, furrow or mark, scratch, write, plough, cut up flesh'; *vri:sa* 'writing'. Kuwi (S) *ra:c-* 'to write'; *bri:-* to draw'. (4304).

803. Ta. Ma. *va:l* 'to exist, live'. Ko. *va:l-* '(woman) lives prosperously, with husband'. To. *poθk-* 'to prosper'. Ka. *ba:l, barduku, bałduńku, barduńku, baduku, badaku, badiku, baduńku.* 'to live'. Kod *ba:l-*. Tu. *ba:l-, baduku-*. Te. *b(r)atuku, b(r)aduku* 'to live', n. 'life, existence' *bradimi* 'living'. Kol. Nk. *bat-* 'to live in a place'. Pa. (S) *badk-* 'to live'. Kui *ba:rti* 'longevity' Kuwi *batk-* 'to live'. (440)

804. Ta. Ma. *viral* 'finger, toe'. Ko. *verl,*. To. *pe:L.* Ka. *beral, beral(u)* Kod. *bera*. Tu *bireli, bereli*. Te. *v(r)e:lu*, Kol. Nk. *vende*. Pa. Ga. *vande*. Go. *wirinj, warenj*, (M) *virasku verenj*, (A) *vəranj*. Konḍa *raska, verska* Pe. *vacka*. Mand *vehpe*. Kui *vanju*. Kuwi (Su.) *vanju*, (P) *verma*. (4436)

See also example 206.

**16. 1.6.** Metathesis operates in a few instances in the languages of the Telugu-Kuwi group although the consonant after the initial vowel is not alveolar or retroflex provided that the

word does not begin with a consonant originally; example 809 is the sole exception for this. This is fairly common in the class of pronouns (including their oblique bases) so that it constitutes a major exception to the rule which specifies the consonants that occur in the C<sub>2</sub> position (see 16. 1.4).

805. Ta. Ma *ukir* 'finger-nail, toe-nail, claw'. Ko *u:r* To. *ü:r* Ka. *ugur*; *ugi* 'to hurt, tear, tend with the nails'. Ko<sup>d</sup> *oy* 'nail'. Tu *uguru*, Te. *go:ru* (< \**okar*). Kol. Nk. Nk (Ch). Go. (S) *go:r* (< Te.). Pa. *ge:ri*, Ga (S) *ge:re*. Mand. *gu:r* Konda *go:ru*. Kui *go:ra*, *unguli*, (K) *unjuli*. Kuwi *go:ru*. Kur. *orox*, *orox*, Malt. *orGu*. Br. *o:r*. (479).

806. Te. *ka:-*, variant of *agu-*, *avu* 'to be, become', as in *ka:-du* (< \**a:k-a:tu*) 'it is not so-and--so', *ka:n,- ga:n* (< \**a:k-an*) infinitive: Ta. Ma. *ai(ku)* 'to be, become' (282).

807. Te. *na:n*, variant of *an-an*, infinitive of *anu-* 'to say': Ta. Ma. Ka *en-* (< \**yan-*; 737).

808. Konda *mu:l-* (*mu:t-* 'to urinate'; *mu:lk* 'urine'. Pe. *mu:nku* 'urine'. Manda *mu:nke*. Kui *mu:l-(mu:t-)* 'to urinate'; *mu:lk* 'urine'. Kuwi (F) *mru:'ka*, (S) *munka*; (Su.) *mnu:ka*, (P) *mu:nka*; (Su.P.) *mu:nk-* 'to urinate', (F) *mru:k-*, (S) *mu:nk-* Kol. *umbul*, (Kin) *umul-* 'to urinate'. Nk. *umbul-*. Pa. *umbl-*. Kur. *umbul-*, *umul-* Malt. *umbl-*. (553)

809. Konda *ga:lu*, *ga:ru* 'daughter'. Pe. *ga:r*; *ga:rc* 'girl'. Mand. *ga:r* 'daughter', *na:-mga:r* 'my dughter'; *ga:reh* 'girl'. < \**makał* (3768).

The oblique bases *\*na:-< \*anya-* of 1st sg. pronoun (4234), *\*ma:-< \*ama-* of the 1st excl. pl. pronoun (4231), *\*ni:-< \*ina-* of the 2nd sg. pronoun, (3051) and *\*mi:-< \*ima-* of the 2nd pl. pronoun, (3055) of Telugu-Kuwi; also Te. *mana-< \*nama-*, oblique base of 1st incl. pl. pronoun (3019). (See for details, Subrahmanyam, P.S 1967-68.)

Te. *vā:du* (inscr. *va:n̥tu* 'he (distant)'). Kon̥da *va:n̥tu* (< \**avan̥t̥*); Te. *va:ru* 'they (hum.)'. Kon̥da *va:r* (< \**avar*) (1); Te. *vī:du* 'he (proximate)'. Kon̥da *ve:n̥tu* (< \**ivān̥t̥*); Te. *vi:ru* 'they (hum, proximate)'. Kon̥da *ve:r* (< \**ivar.*) (351); Te. *da:ni-*, Go. *ta:n-*. Kon̥da *dani-* < \* *atani-*, oblique base of \**at* 'she, it (distant)' (1); Te. *di:ni*, Go. *te:n-*, Kon̥da *deni*. (< \**itan(i)-*, oblique base of \**it* 'she, it (proximate)' (351); Te. *de:ni-* < \**etani-*, oblique base of *edi*, *e:di* 'which' (4228); Te. *va:ni* < \**avani-*, (mod.) *va:ti-* < \**avat̥ti-*, oblique base of *avi* 'they (neut)' (1); Te. *vi:ni* < \**ivani-*, (mod) *vi:ti-* < \**ivat̥ti-*, oblique base of *ivi* 'they (neut, proximate)' (351); Te. *ve:ru*, variant of *evaru* 'who (hum)'. (4228). Tu. (B), *imbałi*, *umbałi*, (C) *mo:lu* 'this woman'; (B) *mukułu*, *mo:kułu*, (C) *me:ri*, *imberi*, 'these persons; *mu:lu* *muļu*, *mulpa*, *muļla*, (C) *mulpa* 'here'; *muļta* 'of this place' (351).

16. 1.7. In Kuwi, Pengo and Mand̥a, there are a number of instances for the loss of the first consonant of the word-initial consonant cluster that has resulted through metathesis (see also footnote 8). Gon̥di (only certain dialects), Kon̥da and Kui also show this development in a few cases. If the first consonant in the cluster is *n*, it is dropped in all the six languages. This process, which must have started first in words beginning with *n*, later spread to words beginning with other consonants (*g*, *t*, *p*, *m*, *v*, *s*) in individual languages other than Kui. The following are the examples.

810. Pe. *ri:ga* 'shadow' Mand̥ *ri:ge*. Kui *ru:ga*; (P) *ru:gedi*. Kuwi (P) *rī:a* < \**n̥li:-*; Ta. *ni:lal* *nilal*. (3046).

811. Kon̥da *rug-* 'to enter'. Pe. Mand̥. *rug-* 'to hide (intr.)'. Kui *ruk-* 'to thrust in between'; *ru:d-* 'to crawl under, creep under or through', *rond-* : 'to slip through'. Kuwi (Su.) *rug* - 'to hide (intr.) < \**n̥lu-* Ta. *nułai* 'to creep through a narrow passage, get into'. (3076).

812. Go. (Ma. Koya) *le:nj* 'moon', (M) *lenj* 'month'. Konda *le:ñju* 'moon'. Pe. Mand. *le:nj* 'moon, month'. Kui *da:nju*. Kuwi *le:nju*< \**nle:-*: Ta. *nilavu*, *nila:*. Pa. *neliñ*. Go. (A) *nele:nj*. (3113).

813. Go. (Tr. W.) *ro:p-*, (Mu. Ma. Koya ) *lo:p-* 'to swallow, gulp down' \**nlo:--* : Ta. *nol* 'to swallow'. (3141)

814. Konda *raksi-* 'to boil'. Pe. *rakhi-* Kui (Su.) *rag-*, (T) *varg-*, (S) *lask-* (S 861)

815. Pe. *re:ñ(g)-* 'to lie on the back'. Mand. *re:ñ(g)* 'to fall backward' : Te. *velikilu* 'to fall or lie on the back'. (S 878).

816. Go. (G.Mu.) *re:ka* 'chironji'. Pe. *re:ka mar.* Mand. *re:ko*. Kui *sre:ko* Kuwi (T) *re:ko* : Go. *sare:ka:*, (A) *serka:*. (2160).

817. Konda *ra:pi* 'cowdung', *ra:nu* 'ox'; (Pu:lgura dial.) *sara* 'bull'. Pe. Mand. Kuwi (Su.P.) *ra pi* 'cowdung': Go. (A) *sara:pi*; 'cowdung'. Pa. *carpi*. (1986).

818. Pe. Mand. *jap-* 'to teach', *japa-* 'to learn'. Kuwi (Su.) *ja:p-* 'to learn, teach'; (F) *jap-*. Kui *gra:mb-* 'to learn'; *gra:p-* 'to teach' (1090).

818a Go. (SR) *reh-* 'to open'. Konda *re:-*, *tere-*. Pe. Mand. *je:-*. Kui *da:-*. Kuwi (Su. S.) *de-* : Go. (A) *teri:-*, Te. *teracu*. (2667)

819. Go (Tr.) *racc-* 'to forget where one is or lose one's way (esp. in the dark), live among people and become like them'; (Ph.) *racc-* 'to lose'. Pe. *jan(g)-* 'to be lost', *jak-* 'to lose'. Mand. *da:ng-* 'to be lost'; *da:k-* 'to lose'. Kuwi (Su.) *ja:ng-*, (F) *jang-* 'to get lost': Ta. *mara* 'to forget'. Te. *maracu*, Kui *mra:ng-* 'to be lost, mislaid'. (3897)

16. 1.8. Krishnamurti (1978a) concludes that the process of apical displacement first started in the proto-stage of Telugu,

Gondi, Konda, Pengo, Mand $\ddot{a}$  Kui and Kuwi and at that stage only a few lexical items, all or most of which begin with a vowel were affected by it.<sup>9</sup> Later it spread to other lexical items including those that begin with consonants in the individual languages or language-subgroups. This indicates that sound change (or perhaps certain types of sound change as this) spreads gradually and affects the lexicon in due course. The motivation for the process is the desire to preserve the apicals in the root from threatened assimilation (as in Te. valadu > vaddu 'it is not wanted')<sup>10</sup> and to give the apical consonants

<sup>9</sup>. Krishnamurti (1978a:11) gives ten items that are affected by apical displacement in all or most of the languages of the Gondi-Kuwi group. They are as follows.

1. \*re:v- 'to dig' (Go. (Koya) de:v-. Pe. rav-, rov-. Mand. rav. Kui raj (K) rab-. Kuwi (Su) rev-. S 837; cf. Te. t(r)avvu, Go. ta;r- 2547; also cf. 2597).
2. \*ro:nc- (intr.), \*ro:cc- (tr.) 'to pile up' (Go. (Tr.) ro:s-. Konda. ros-. Pe. ro:h- Mand. ru:h-. Kui ro:nj- (intr.), ro:s-, ro:sk- (tr.); S 833)
3. \*l:ak- 'to sacrifice' Go. (Elwin) la:k-. Pe Mand. ra:k-. Kui Kuwi la:k-. (S 846).
4. \*ri-<\*ir-u 'two (adj.)' (Konda ri'er 'two men'. Pe. Mand. ri 'two' Kui ri:, (K) ri. Kuwi ri:. 401).
5. \*lo:-<\*nol- 'to sprinkle, scatter, bale out' (Go. rosk-, losk-, locc-. Konda lonz-. Pe, ronj-. Kui la:nj-, (K) lanj-. Kuwi (S) lanj-, (Su.) ranj-. 258).
6. \*ru-<\*ur-u 'to ignite, sweat' (Konda run 'heat'. Pe. ru:c- 'to sweat'. Mand rund- 'to ignite'. Kui rut- (K) ru-. Kuwi (D) rund- 'to ignite' (Su. P.) ru:h- 'to sweat'. 565)
7. \*pli:-<\*ur-u 'unripe mango' (Konda pi $\acute{r}$ ika, pri:ka, (BB) pi $\acute{r}$ ka. Pe. Mand. pri:la. Kui pria Kuwi prila:. S 677).

The other three items are examples 811, 812 and 818.

<sup>10</sup>. This point was also made by Ramaswami Aiyar (1931-32b: 476).

the distributional privilege of occurrence in the word-initial position, which is already enjoyed by the other consonants. The initial consonant clusters that are created in this way and are against the general Dravidian pattern are avoided in some of the languages by dropping one of the consonants: modern Telugu dropped the second consonant, i.e. *r*, while Pengo, Manda and in a few cases, Kuwi, Gondi, Konda and Kui dropped the first consonant (of these four languages, Kuwi has the largest number of instances and the number decreases in Gondi, Konda and Kui in that order). Instances of dialectal variation, one form affected by the process and the other not, as *Konda pra:su*, (BB) *parasu* 'water vessel made out of a gourd shell' (S 642), Kui *gerng-*, *greng-* 'to groan, moan, (1630), Kuwi (F) *ke:rnj-* 'to warm oneself in the sun', (Su.) *krenj-* indicate that this process is still active and has not yet covered the entire area; all words that could be affected by this process are not actually affected as shown by Te. *tirugu* 'to turn' but *trippi* 'to cause to turn' (2655), *ela-*, *le:-* 'tender' (436), etc. This phenomenon is a case of what Sapir calls 'drift'. Krishnamurti, in agreement with Ramaswami Aiyar (1931-32b), further draws attention to the similarity between this process in Telugu-Kuwi and aphaeresis in some of the south Dravidian languages, which, like the former, brings apical consonants to the word-initial position. The similarity may be due to areal spread of typological pressure from one group to the other, which are contiguous, rather than due to any intimate genetic contract between the two groups.

### **16. 2. Metathesis/aphaeresis in Brahui**

**16.2.1.** Brahui contains seven items showing metathesis or aphaeresis (Emeneau 1971 : 192-194). The conditioning for the operation of this process is not entirely clear but the following tentative statement was given by Emeneau.

$$(C_1)V_1C_2V_2C_3(C_4) \rightarrow (C_1)rVC_3(C_4)$$

where  $C_2 = *r, *l, *l$  or  $*t$  ( $>Br.$   $r$ )

$C_1$  is  $*t$  in five items,  $*p$  in one and  $\phi$  in another. The process seems to be metathesis in two instances (examples 822 and 824) whereas it could be viewed as aphaeresis (i.e. loss of  $V_1$ ) in the remaining five cases. The inclusion of  $C_3(C_4)$  in the rule avoids the necessity of considering as exceptions items that do not contain the sequence and do not show this process. However, a few items still look like exceptions as, for example, Br. *pirG-* 'to twist' (:Ta. Ma. *piri* 'twist', 3436). It is notable that this process is absent in words beginning with  $*k$  or  $*c$ . Paucity of the material does not allow us to make a more rigorous statement of development. The items are the following.

820. Br. *trukk-* 'to pluck off, pluck, strip'. : Kur. *turux-* 'to take the skin off, shell, strip' (§ 528).

821. Br. *ru:s-* 'to pull off, pluck': Ta. Ma. *iļu* 'to draw', Te. *i:đ(u)cu* 'to pull'. (427).

822. Br. *trump, tramp* 'a drop of water' : Ta. *co:ri* 'blood, rain, shower', *cotr, cori* 'to flow down'. (2353)

823. Br. *trikk-* 'to sprout, protrude ; *trikk* 'sprouting, shoot' : Ta. *talai* 'to sprout', n. 'sprout'. (2545)

824. Br. *trikk-* 'to wither up, change colour, fade' : Ta. *tiraniku* 'to be wrinkled, dry up as dead leaves'; *tirakku* 'to wrinkle'. (2653)

825. Br. *trujj-* 'to choke' : Ta. *turu* 'to cram food into the mouth'. (2770)

826. Br. *princ-* 'to squeeze out, press hard' : Ta. Ma. *pili* 'to squeeze.' (3440a)

### 16.3. Aphaeresis in South Dravidian

16.3.1. In South Dravidian, Tulu and Iruḷa (a speech closely connected with Tamil–Malaya:ḷam) show many instances of aphaeresis.<sup>11</sup> In these, a short vowel in the word-initial position is lost before an alveolar or retroflex consonant. Only the common dialect of Tuḷu shows this process and the Brahmin dialect retains the vowel. The retroflex (*d*, *n* or *l*) that comes to the initial position through aphaeresis changes to the corresponding dental or alveolar (*d*, *n* or *l*).

Colloquial Tamil, colloquial Malaya:ḷam, Kannada and Koḍagu also show aphaeresis in a few cases. In Tamil–Malayalam (in the spoken variety) it takes place even in words beginning with consonants (provided that the following consonant is a non-nasal alveolar or retroflex). Examples.

#### A. Tamil–Malayalam:

1. Ta. *iravu*, *ira*, *ira*:, (C) *ra:(vu)* ‘night’,. Ma. *iravu*, *ira*:, *ra*: (2102).
2. Ta. *ara:vu*, *ira:vu*, (C) *ra:vu* ‘file, polish’. Ma. *ira:vu*, *ra:ku*. (191b)
3. Ta. *uva*:, (C) *va:vu* ‘full moon, new moon’. Ma. *uva*:, *va:vu*. Koḍ *ba:vu* (< Pkt. *ova:sa-* < Skt. *upava:sa* ‘a fast’ DBIA 54)
4. Ma. *ula:ttu* (C) *la:ttu* ‘to take for a walk (children, etc.) Ta. *ula:ttu*. (2218).
5. Ta. *nilavu*, *nila*: ‘moon light, moon’. Ma. *nila:(vu)*, (C) *nla*:, *la*: (3113).
6. Ta. *palavu*, *pala*:, *pila*:, (C) *pla*: ‘jack-tree’. Ma. *pila:vu*, *pla:vu*, *pla:-kka:yi* ‘jack-fruit’. (3290)

<sup>11</sup>. See for Tuḷu, Ramaswami Aiyar 1931–32b : 455–457; Shankara Bhat 1966a : 3–4; for Iruḷa, Zvelebil 1973:13, Diffloth 1969:561.

7. Ta. *pura:*, *pura*, *puravam*, *puravu* (C) *pra:* 'dove, pigeon'. Ma. *piṭa:vū*, *pra:vū*. (3555)
8. Ta. *viṭa*, *viṭa:*, *viṭavu*, *viṭa:tti*, (C) *vṭa:* 'wood-apple', Ma. *viṭa:*. (4535)
9. Ta. *kaṭavu*, *kaṭa:*, *kaṭa:y*, (C) *kṭa:* 'male of sheep or goat, he buffalo'; *kiṭa:* 'buffalo, bull, ram'; *kaṭa:ri*, *kiṭa:ri* 'heifer, young cow that has not calved'. Ma. *kaṭa:*, *kiṭa:*, *kiṭa:vū* 'male of cattle, young and vigorous'; *kaṭacci* 'heifer, young cow, calf'. (943).
10. Ma. *ilanta*, *lanta* '*Zizyphus jujuba*' (402)

B. Kannada, Koḍagu:

1. Ka. *araṇe*, *ra:nē*, *ra:ni* 'greenish kind of lizard which is said to poison by licking'. (170)
2. Ka. *reñje* 'pointed leaved ape-flower'. Tu. *reñja*, *r eñji*. Ta. *ilañci*, *iriñci*. Ma. *ilaññi*, *ireññi*, (422).
3. Ka. *alapaṭe*, *alasaṭe*, *lampate* 'exhaustion, weariness' (200)
4. Ka. *alampu*, *lampu* 'beauty, ornament, pleasure, magnificence' (210)
5. Ka. *erake*, *erānke*, *rakke*, *gekke* 'wing'. Koḍ. *rekke*. Tu. *edinke*, *renke* (2133)
6. Ka. *reppe*, *rappe* 'eyelid'. Tu. *reppē*, *rampē*: Ta. *irappai*, *rappai*, *reppai*. (4242)
7. Ka. *rampa*, *rambu* 'clamour, noise'. Koḍ. *rampa*. Tu. *ramba:roīti*, *rambha:ṭa*. (4237).

C Tuḍu (common dialect)

1. *dakki-*, (B) [adakku- 'to throw'
2. *dappu-*, (B) aḍappu- 'to plough': Ta. Ma. *uḷu*. (592)

3. *lappu*, (B) *ałappu* 'to measure' ; Ta. Ma. *ała* (252)
4. *nuppu*, (B) *uṇpu*, *umpu* 'cooked rice' : Ta. Ma. *uṇ* 'to eat or drink'. (516)
5. *latti*, (B) *ełatti* 'tender' : Ta. Ma. *iłā(m)*. (436)
6. *leppu*, (B) *ołeppu-* 'to call'. (?240)
7. *datti*, (B) *edattī* 'left' : Ta. *iṭai*, *iṭam*. (381)
8. *deñji*, (B) *eđeñji* 'crab' : Ta. *ñan̄tu*, *ñen̄tu*. (2362)
9. *nuṅgu*, (B) *uṇuṅgu* 'tick'.
10. *lumbu-*, (B) *alumbu-* 'to wash clothes': Ta. *alampu*. (208)
11. *raddi* (B) *eradi* 'two' : Ta. *iran̄tu*. (401)
12. *reñki*, (B) *oreñku-* 'to smear;
13. *nungu-* (B) *uṇuṅgu-* 'to dry' : Ta. *uṇañku*. (517)

#### D. Iruña

1. *dakku*, *da:kku*, *dakke mara* 'areca-palm' : Ta. *aṭai-kka:y*. (78)
2. *de-* 'to break (tr.)', *depisu* 'to cause to break' : Ta. *uṭai*. (799)
3. *rullu* 'to roll' : Ta. *uruł* (571 a)
4. *re-* 'to grind' : Ta. *arai*. (191a)
5. *le:-* 'to roam, wander' : Ta. *alai* (203)
6. *la:ru-* 'to shout, roar' : Ta. : *alaṛu*. (211)
7. *le:-* 'to call' : Ta. *ałai*. (240)
8. *rambu-* 'to become full', *rappu* tr. : Ta. *nigai* 'to become full'. (3049)
9. *lakke* 'postle' : Ta. *ulakkai*. (580)
10. *reccu-* 'to draw water' : Ta. *iṭai*. Ka. *eracu*, *ercu*. (735)

## Backing of front vowels in Kodagu and Tulu

### 17. 1. Kodagu

17. 1.1. In contradistinction to the ten vowel phonemes that occur in the other Dravidian languages except Toda, Kodagu has fourteen vowel phonemes, the four extra ones being *i*, *i:*, *ē*, and *ē:* (the first two are high back unrounded and the last two mid back unrounded). The extra vowels result mostly from the splitting of original front vowels under statable conditions. The original front vowels merged also with the corresponding back vowels under similar but slightly different circumstances. Emeneau (1970b, actually written in 1967) made a detailed study of the historical developments involved. Earlier to him, Godavarma (1946) stated some of the historical changes. P. Kothandaraman (1969) also treated the subject independently and arrived at similar conclusions although his treatment is not as comprehensive as that of Emeneau.

The following examples establish the back unrounded vowels as phonemically different from the corresponding front and back rounded vowels

<i>timbi</i> 'I will eat'	<i>akki</i> 'husked rice'
<i>tumbi</i> 'beetle'	<i>takku</i> 'may give (to me or you)'
<i>timmia</i> 'you sneezed'	<i>takkii</i> 'talk, language'

*ti:ti* 'feed'  
*ku;ti* 'noise'  
*ti:te* 'I used it up'

<i>geddē</i> 'I won'	<i>a:ne</i> 'elephant'
<i>poddīci</i> 'god possessed (a shaman)'	<i>a:nē</i> 'I became'
<i>eddē</i> 'I got up'	<i>ma:na</i> 'self-respect'
<i>baddē</i> 'I ruled'	

*teku* 'may smear'  
*po:ku* 'may go'  
*kē:ku* 'may ask/hear'  
*ka:ku* 'may call'

17. 1.2. The rules for the Kodagu developments are as follows:

$$1. \quad \left\{ \begin{matrix} *e \\ *i \end{matrix} \right\} \rightarrow a \quad / \quad C_1 - R \quad *a(y)$$

where  $C_1 = *k, *c, *p$  or  $*$ .

\*i or \*e (which latter can be from original, i.e. PDr. \*i or \*e before a single consonant followed by \*a(y)) become Kodagu \*a before a retroflex consonant that is followed by \*a or \*ay; this rule, however, operates only when the word begins with one of the consonants \*k, \*c \*p and \*m, Examples 835, 838, 839, 840, 843, show that this change does not operate in words beginning with a vowel or the consonants n and b (<\*v).

827. Kad. *kađake* 'bed' : Ta. *kiṭakkai*. Ma. *kiṭakka*. (1277)

828. Kad. *kađaṅgi* 'deep, waterless ditch': Ta. *kiṭaṅku*, Ka. *kađaṅgu*, (1279, probably Kad. *l.w.* < Ka.)

829. Kođ. *kaļa-* 'to dig' : Ta. *kiļai*. (1321)

830. Kođ. *jaļe* 'long thin pliable stick', *jaļe-* 'to sway like a long pliable stick', *jaļa-* 'to make sway' : Ka. *seļe* 'twig, stick'. Te. *sela*. (2294).

831. Kođ. *pađa manđe* 'back of head', *pađa neļti* 'nape of neck' : Ta. *piļar* 'nape of neck'. Ka. *peđa* 'state of being behind, the back'. (3411).

832. (=1169) Kođ. *palļe* 'female of various animals' : Ta. *pilļai*. (3449)

833. Kođ. *maļu*<sup>1</sup> (<pre-Kođ. \**maļagu*<\**meļagu*) 'chillies' : Ta. Ma. *miļaku* 'pepper'. Ka. *meņasu*, *meļasu*, *moļasu*. (3986)

### 17. 1.3: Rule 2.

$$\left[ \begin{matrix} +\text{vocalic} \\ -\text{Round} \end{matrix} \right] \rightarrow \left[ \begin{matrix} +\text{Back} \\ -\text{Round} \end{matrix} \right] / \left( \begin{matrix} [-\text{Palatal}] \\ [-\text{labial}] \end{matrix} \right) - \left\{ \begin{matrix} [+ \text{Retroflex}] \\ *t \text{ (single)} \end{matrix} \right\}$$

An original front vowel (\*i, \*i:, \*e, \*e:) becomes in Kođagu the corresponding back unround vowel (i, i:, ē, ē:)

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<sup>1</sup>. The derivative elements \*-aku, \*-uku, and \*-avu/\*-uvu yield Kođ. -u; further examples are:

Kođ. *alu* 'cowrie' : Ta. *alaku* 'number, calculation, cowries used in reckoning'. (202)

Kođ. *kađu* 'mustard seed' : Ta. Ma. *kaļuku*. (953)

Kođ. *tađu* 'lateness, delay' : Ka. Tu. Te. *tađavu* (2460)

Kođ. *koru*, *koravu*, 'defect, deficiency' : Ta. *kuļaivu*, Ma. *kuļavu* (1537).

Kođ. *nađu* 'middle' : Ta. *naļuvu* (2959)

This rule must have operated after the rule that changed the root vowel. The preceding \*v seems to be responsible for the presence of u rather than i in these cases; \*-k- might have changed to \*v before its deletion.

before a retroflex consonant ( $*\ell$ ,  $*\eta$ ,  $*\l$  and  $*\hbar$ ) or an original single (but not double)  $*\tau$ ; the vowel may be in the word-initial position or it may be preceded by a consonant that other than a palatal or a labial. If the preceding consonant is labial, rule 3 applies. The phonetic motivation for this change of the front vowel before a retroflex consonant is easy to understand. Emeneau (1970b : 153-154) says: "It is to be expected that in any Dravidian language any vowel before a retroflex consonant has an allophone which shows, either in its latter portion or throughout, some retroflexion. This retroflexion involves both a turning up and back of the tongue-tip and, most importantly, a retraction of the body of the tongue (as Firth indicated), which approximates the formation of the back of the tongue in back vowels, rounded or unrounded. In the case of the front unrounded vowels of two heights, high and mid, there result sounds very close to, or perhaps even identical with, retroflexed back unrounded vowels of the two heights. These in Kodagu are the chief allophones of the two new phonemes. Length is irrelevant to the quality. In those instances in which the following retroflex consonant was lost by simplification of a consonant cluster and the vowel remained back unrounded, presumably the retroflexion of the tongue-tip in the vowel formation was lost with the retroflex consonant." The back unrounded vowels, which were originally allophones of the corresponding front vowels began to contrast with the latter and thus attained independent phonemic status after the loss of the conditioning factor, i.e. the following retroflex in consonant clusters, for example, cf. *kē:p-* <*\*ke:lpp-* non-past stem of Kod. *kē:l-*<*\*ke:l* 'to ask, hear' : (Ta. *ke:l(ke:tp-; ke:tł;-* 1677) versus *te:p-*<*\*te:ypp-*, non-past stem of Kod. *te:y<\*te:y* ,to wear off (tr.); to smear' (: Ta. *te:y (-pp-, -tt-)*; 2846); *tütt-<ti:r-tt*, past stem of *ti:r-* 'to use up (<*\*ti:r* 2683) versus *ti:t-<\*ti:rr-* 'to feed by hand' (2670a); *ëpp-<\*elupp-* 'to raise up, make to get up'

(723a) *versus bepp- < \*veypp-* non-past stem of *bey* 'to cook rice' (4540). It is at present not possible to find out the phonetic reason for the change of a front vowel to the corresponding back unrounded vowel before single \**t*.

Examples:

834. Koḍ. *iḍi*- '(wall) falls, (land) slips, to knock over' : Ta. Ma. *iṭi*. (366)

835. Koḍ. *ēṇe* 'double' : Ta. *iṇai* 'union, couple', Ka. *eṇe*. Tu. *iṇe*. (387).

836. Koḍ. *kīndi* 'small metal vessel with spout' : Ta. Ma. *kiṇṭi*. Ka. Tu. Te. *gīndi*. (1289).

837. Koḍ. *giṇi* 'parrot' : Ka. Tu. *giṇi*. (1318)

838 (= 764) Koḍ. *nēḷa* 'shade, shadow' : Ta. Ma. *niḷal, ni:ḷal*. (3046)

839. Koḍ. *ēḍe* 'company or proximity of a person' : Ta. *iṭai* 'place, opportunity'. (368).

840. Koḍ. *ēḍate* 'left (side)' : Ta. *iṭai, iṭattai*. (381)

841. (= 786) Koḍ. *ki:-, ki:lī-* lower, below', *ki:da* 'place below, down', *kippuni* 'lower level in a field', *kikkirē* 'junior member of a house', *kē:kī* 'the east' : Ta. *ki:l* 'below', *kilakku* 'east' (1348).

842. Koḍ. *i:l-* (*i:p-, i:t-*) 'to drag', *i:ku* 'may drag' : Ta. Ma. *iļu*. (427).

843. = (778) Koḍ. *ēleē* 'youth' : Ta. *iļaiyan* 'younger brother'. (436)

844. (= 349) Koḍ. *ē:l-(ē:v-, ēdd-)* 'to get up', *ēp-* 'to make to get up, raise', *ēḍi-* 'to raise' : Ta. *elu, eṭu, eluppu*. (723)

845. Koḍ. *tē:d-* 'to search for' : Ta. Ma. *te:ṭu*. (2844)

846. Koḍ. *nē:d-* 'to earn' : Ta. Ma. *ne:ṭu* (3121)

847. Koḍ. *kirkē* 'small' : Ta. *cīrukkaṇ* 'boy'. Ma. *oeṭukkan* (1326)

848. Kod. *ēraṅg-* '(food, liquid) slips down throat slowly', tr. *ērak-* : Ta. *iṭaṅku*, tr. *iṭakku*. (439)

849. Kod. *ē:r-* 'to be more than enough, (poison) diffuses', *ē:ra* 'more than enough' : Ta. Ma. Ka. *e:ṛu* 'to rise'. (776)

See also examples 465, 466, 467 and 918.

17. 1.4. There are a few seeming exceptions to the above rule and to the rule to be given in 17.2.1. Most of these can be explained as due to analogy or by further restricting the conditioning factors. We have already noted that this development is absent in words that begin with the palatal \*c; examples:

850. Kod. *cirate* 'leopard' : Ta. *cīruttai*. Ka. *cirate*. (2132)

851. Kod. *ci:r-* 'to grumble' : Ta. *ci:ṛu* 'to hiss as a serpent, be infuriated'. (2169)

852. Kod. *cenṭi* 'ball' < \**cenṭu*. (2275)

853. Kod. *celṭi* 'flea' : Ta. Ma. *ceḷlu*. (2296)

The palatal, which is pronounced in the front part of the mouth has prevented the backing of the following front vowel.

This development is absent double \**ṭṭ* presumably because it has already changed to dental *t̪* by that time. In verbs with \**ṭ* in the basic stem and \**ṭṭ* in the past stem, the vowel in the former also remains unchanged probably under the influence of the latter, examples:

854. Kod. *tetti* 'narrow walk built on around house' : Ta. *tetti* 'raised veranda'. (2834)

855. Kod. *netti* 'forehead' : Ta. Ma. *netti*. (3118)

856. Kod. *ter-* (*tett-*) 'to pay (penalty)': Ko. *ter-* (*teṭ-*). (2833)

857. Kod. *per-* (*pett-*) 'to bear (child)' : Ta. *peṭu* (*petṭ-*). (3622)

The change does not take place if  $*\tau$  is followed by *i*, e.g. *kiri* 'lip' (Ma. *kiri* 'corner of the mouth' *citi*, *ciri* 'lip'; 1324); *te:n-eri* 'honey comb' (: Tu. *edi*, 441); *teri-* 'to totter about' (: Ta. Ma. *terru* 'to stumble, slip', 2835).

A few examples, however, yield no possible reason for exception to the rule : *eraci* 'meat' Ta. *iṭaicci*; 450), *nera-* 'to fill'· *nere* 'to attain puberty' (: Ta. *nirai* 'to become full; to fill'; 3049)

17. 1.5. Examples 854-857 show that the vowel changes (of rules 2 and 3) must have taken place after the change  $*\tau\tau$  > Koḍ. *tt*. But the merger of  $*\tau$  with  $*r$  as well as the dropping of the retroflex consonant in clusters are clearly subsequent to the vowel changes.<sup>2</sup> For absence of change before  $*\tau$ , see examples 206, 252, 347 and 468.

## 17.2. Koḍagu and Tuḍu.

### 17.2.1. Rule 3

$$\left[ \begin{array}{l} +\text{vocalic} \end{array} \right] \rightarrow \left[ \begin{array}{l} +\text{Back} \\ +\text{round} \end{array} \right] / \left[ \begin{array}{l} +\text{labial} \end{array} \right] \rightarrow \left\{ \begin{array}{l} \left[ \begin{array}{l} +\text{Retroflex} \end{array} \right] \\ *\tau \text{ (single)} \end{array} \right\}$$

An original front vowel becomes in Koḍagu the corresponding back rounded vowel between a labial and a retroflex or  $*\tau$ . The resultant vowel in this rule is rounded unlike that in rule 2; this rounding is due to the preceding labial consonant. Tuḍu also has an almost similar rule the only difference between Koḍagu and Tuḍu being that in the latter language this change

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<sup>2</sup>. In the case of paradigmatic sets like those in examples 842 and 844, one could say that the changed vowels spread analogically to forms that have lost the retroflex. But examples like 346, 861 and 866 in which there are no paradigmatic sets show beyond doubt that the loss of retroflex took place after the vocalic change.

does not takes place if the consonant that follows the vowel is \**t*; the rule is otherwise the same in both the languages.<sup>3</sup> A similar change is found to occur in Colloquial Tamil (e.g) *pulle* ‘child’. <Old *pillai*; *puti-* ‘to hold, catch’ <Old. *piṭi-*. and certain non-standard dialects of Malayalam (e.g. *puṇṇa:kkə* ‘oil cack’, for *piṇṇa:kkə*; *putṭə* ‘flour’ for *pitṭə*).

858. Koḍ. *puḍi-* ‘to catch, hold’. Tu. *puḍi* ‘handle’: Ta. Ma. *piṭi* ‘to casch, hold’. (3412)

859. Koḍ. *puṇḍ-* ‘to squeeze’. Tu. *puṇḍi-*, *puṇṭu-*, *pur(e)ñcu-*: Ta. Ma. Ka. *pili*. (3440a)

860. Koḍ. *muḍi* ‘young unripe fruit’, Tu. *miḍi*, *muḍi* : Ma. *miṭi(l)*. Ka. *midi*. (3975).

861. Koḍ. *mugg-* ‘to swallow’ : Ta. *milunku*. (3985)

862. Koḍ. *bole-* ‘to become full-grown’. *bole* ‘crop’. Tu. *bulepū-* ‘to grow’; (B) *buḷe*, (C) *bule* ‘crop’ : Ta. *viḷai*. (4464)

863. Koḍ. *buḍ-* (*buṭ-*) ‘to release, let go’; *buḍi* ‘hut of a toddy-tapper’. Tu. *buḍu-* ‘to leave, let go’; *biḍu*. *buḍu*, ‘manor-house, mansion’ : Ta. *viṭu* ‘to leave’, *viṭu* ‘house’ (4419)

864. Koḍ. *bu:ṭ-* (*bu:v-*, *budd-*) ‘to fall’, *buddu-* ‘to lie down’; *bu:k-* ‘to fell (tree)’. Tu. (B) *bu:lu-*; (C) *bu:ru* ‘to fall’ : Ta. Ma. *viḷu*, *vi:l*. (4457).

865. Koḍ. *ponṇi* ‘wife, female’. Tu. *ponṇu* ‘girl, female’; *ponje:vu* ‘a female in general’ : Ta. Ma. *peṇ*. (3608a)

866. Koḍ. *muk-* ‘to smear (mud, manure water on ground)’: Ta. Ma. *meluku*. (4169)

<sup>3</sup>. Ramaswami Aiyar (1936b : 396, 434-5) has already noted this Tuḷu phenomenon. Godavarma (1946 : 421) has noted the similarity between Tuḷu and Koḍagu in this matter earlier to Emeneau (1970b : 157-158)

867 Ko<sup>d</sup>. *boṇṇe* ney 'butter'. Tu. *beṇṇe*, *boṇṇeyi* : Ta. *ven-*  
*ney*, *veṇṇai*. Ka. *benne*. Te. *venna*. (4511)

868.(=926) Ko<sup>d</sup>. *bo:ṭe* 'hunting'. Tu. *be:ṇṭe*, *bo:ṇṭe*, *be:ṭi* : Ta.  
*ve:ṭṭai*. (4547)

869. Ko<sup>d</sup>. *purikī* 'mosquito' : Ma. *piṇukku*. (3451)

870. Ko<sup>d</sup>. *mu:r-* 'to disregard, disobey (one's words), be  
superior to, out do' : Ka. Te. *mi:ṛu* 'to go beyond'. (3998)

871. Ko<sup>d</sup>. *bo:re* 'different' : Ta. Ma. Te. *ve:ṛu*. (4564)

17. 2.2. Tu<sup>lu</sup> seems to have more instances for this development than Ko<sup>d</sup>agu although it is possible that still there may be some Ko<sup>d</sup>agu words which have not yet been recorded. A few additional examples for Tu<sup>lu</sup> are *puna* 'corpse' (< \**pinam*, 3420), *boṭakī* 'the fat of fish' (< \**velakk-*; 4337b), *boṭṭu* 'high, lofty (< \**veṭṭ-*; 4503), *bolaku-* 'to solder' (< \**velakk-*; 4525), etc.

17.2.3. Etyma like those in DED 3423 (Ta. *piṇai*, *punai*, 'to unite, tie', *puṇar* 'to join', *piṇi* 'to tie' Ka. *peṇe* 'to unite or tie', *ponar* 'to be joined or united'. Te. *penayu* 'to be joined', *ponaru* 'to happen, occur') point to the fact that this alternation is present sporadically in a few cases in languages other than Ko<sup>d</sup>agu and Tu<sup>lu</sup>.

17.2.4. Emeneau considers this commonness between Tu<sup>lu</sup> and Ko<sup>d</sup>agu as due to areal convergence, the feature originating in Tu<sup>lu</sup> and then spreading to the neighbouring Ko<sup>d</sup>agu.<sup>4</sup>

<sup>4</sup> He (1970b:158) says: "We have then an isogloss that cuts off Ko<sup>d</sup>agu and Tu<sup>lu</sup> from the rest of the languages. Convergence in contiguous languages argues diffusion as the explanation. In this instance it is clear that Tu<sup>lu</sup>va brahmins have long been the officiants at Hindu temples in the Coorg territory (e.g. that at the source of the Kaveri river and that

### 17. 3. Developments in word-final syllable in Kodagu.

17. 3.1. In the word-final position also, the vowels *i* and *ë* contrast with other vowels in Kodagu. The historical changes responsible for this development are sketched below. The enunciative *u* (see 8.3) normally becomes *i* in Kodagu as in Tamil-Malayalam but it remains as *u* in *nađu* 'middle' (DED 2959), *puļu* 'worm' (DED 3537), *kuru* 'seed' (DED 1483), *na:vu* 'tongue' (DED 3009), *ca:vu* 'corpse' (2002) and *ba:vu* 'day of new moon or full moon' (DBIA 54); cf. also *avu* 'those (non-hum) and *ivu* 'these (non-hum.)'. *nađu* could be from \**nađuvu* through the change of \**uvu*>*u*. For the others, we have to assume that the final *u* remains as rounded if it is preceded (i) by a short back vowel which is followed by a single consonant or (ii) by the labial *v*.<sup>5</sup> Apart from the above cases, final *u* results from contractions (given in foot note 1, p.251), and also from the loss of the following \**m* (in the verb forms with the suffix \*-*um*, e.g. *bo:ñdu* 'it is wanted <\*ve:*ñt*-*um* and in the conjunctive suffix *u:<\*um* 'and, also'). These developments created the contrast between *i* and *u* in the word-final position.

Original \*-*c(:)n* and \*-*an* loss the final nasal and change to mid back enrounded *ë* (the *n* appears morphonemically before a clitic that begins with a vowel) e.g. *buđë-<\*vit-*t*e:n* 'I released'; *avë:n<\*avan* 'he'.

in Mercara). The conditions are correct for arguing that there could be Tuđu linguistic influence on Kodagu, and I think that it is correct to suggest this influence as a source of the 'areal' convergence for this vowel development...".

<sup>5</sup>. 2 sg. imperative forms, however, contain only *i* at the end even if they contain a back vowel in the root Emeneau (1970b : 147-148) explains this by saying that *i* spread to all such forms analogically.

The individual phonemic status of the new sounds *i* and *ë* was thus achieved through different historical processes in the initial and the final syllables. It was firmly established because of the identical results in both the positions although the processes that were responsible for the results were different in each case.

#### 17. 4. Relative Chronology.

17. 4.1. It is possible to give the relative chronology of some of the changes that have been discussed so far (see also 17.1.5). Rule 1 must have been anterior to rules 2 and 3 and to the contractions in the derivative elements. Between rules 2 and 3 it is not possible to say which is earlier. They may be simultaneous or more probably rule 2 might have been the intermediary step leading to rule 3.<sup>6</sup> Since the final *u* that results from loss of the following \**m* as well as from contractions is not changed to *i*, we have to conclude that these changes took place after \**u* > Kođ *i*.

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<sup>6</sup>. Emeneau (1970b : 157) left the matter undecided. But, as he has concluded, rule 3 in Kođagu is due to the influence of Tuļu. We can suppose that, earlier to this, rule 2 has operated in words beginning with labials also because the presence of a labial will not inhibit the backing of a following front vowel. For example, \**piti* became \**pidi* by rule 2 and later it became *pudi* by rule 3. Since rule 2 does not occur in Tuļu, it is implausible to argue that the backing process as a whole started in Kođagu only after the occurrence of the Tuļu influence. Back unrounded vowels after a labial are not unusual; *i* occurs after a labial in Tamil.

## Fronting of back vowels before \*-ay in Kota.

### 18.1. Ordered Rules

18. 1. 1. An original back vowel (\**u*, \**u:*, *o* and \**o:*) changes to the corresponding front vowel (*i*, *i:*, *u* and *u:*) in Kota before \*-ay in the second syllable (in the few exceptions \*-ay is in a later syllable).<sup>1</sup> \*-ay presumably became \*-e in pre-Kota as it did in modern Tamil, Ko $\ddot{d}$ agu, Kannada and Tu $\ddot{u}$  (Tu $\ddot{u}$  has *e* in the majority of the dialects); after the back vowels of the root are partially assimilated to this pre-Kota \*-e, the latter was lost because all short vowels other than \**i* (>Ko.y) are lost in Kota non-initial syllables. The rules can be ordered in the following fashion.

1. \*ay → pre-Kota \*e / - #

2.  $[+ \text{vocalic}] \rightarrow [-\text{back}] / - \left[ \begin{array}{c} -\text{high} \\ -\text{back} \\ + \text{vocalic} \end{array} \right]$

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<sup>1</sup>. This development was first treated by Emeneau (1969a:21-34)

$$3. \left[ \begin{array}{c} i \\ \vee \end{array} \right] \rightarrow \left[ \begin{array}{c} y \\ \phi \end{array} \right] / (\mathbf{C})\mathbf{V}\mathbf{C}_1\dots_n -$$

There are some instances in which the rule (i.e. rule 2) does not operate and most of these can be considered as borrowings from one of the neighbouring languages even on other grounds (18.2.).

The following are the examples:

(Note that in cases of *i/e* and *u/o* alternation before *-a*, pre-Kota always shows the mid vowels even when the high vowels are original).

872. (= 760). Ko. *ker* (< pre-Kota \**kot-e*) ‘umbrella’. (*kor*, which must be a loan, also occurs in a proverb) : Ta. *kutai*. Ka. *kode*. (1386)

873. (= 766) Ko. *peg* (< pre-Kota \**pok-e*) ‘smoke’ (*pog* ‘tobacco’ is a loan; tobacco is newly introduced to Kotas) : Ta. *pukai*. Ka. *poge*. (3483)

874. Ko. *per* (< pre-Kota \**por-e*) ‘burden’ : Ta. *porai*, Ka. *pore*. (3729)

875. Ko. *ket* ‘testes, scrotum’ : Ta. *kottai*. [(1722)]

876. Ko. *kerv-* (< pre-Kota \**kor-e*) ‘to bark’ ; Ta. *kurai* (-*tt-*). (1496)

877. Ko. *pen* (< pre-Kota \**pon-e*) ‘bamboo milkpot’ ; Ta. *punai*. (3507)

878. Ko. *elk* ‘pestle’ : Ta. *ulakkai*, Ka. *olake*; *onake*. (580)

879. Ko. *kik* ‘small round basket’ : Ka. Tu. *kukke*. (1357)

880 (= 1089). Ko. *kip* ‘heap (of rubbish, weeds)’ ; Ta. *kuppai* (1440)

881. Ko. *piḍ* 'vulva' : Ta. *punṭai*. (3509)

882. Ko. *miṭk* 'small hammer' : Ta. *muṭṭikai*. (4041)

882a (= 574). Ko. *e:y* 'sp. ochlandra, false bamboo' (also *o:y* which is l.w. <Ta.) : Ta. *o:ṭai*. (879)

883. Ko. *ke:y* 'southwest monsoon' : Ta. *ko:ṭai*. (1827)

884 (= 577). Ko. *te:l* 'forest' : Ta. *co:lai*. (2357)

885. Ko. *mi:l* 'marrow' : Ta. *mu:ṭai* 'brain, marrow'. (4146)

886. Ko. *pi:c* 'cat' : Ta. *pu:ccai*. (3572)

### **18. 2. Unaffected loans.**

18. 2.1. The following are examples for loans (see also examples 872, 873 and 882a). In these, rule 2 has [not operated although the conditions required for it are present. It is obvious that these loans entered into the language after rule 2 has ceased to operate. Rule 3, however, operates in most of these and therefore we have to conclude that such words entered into Kota after the operation of rule 2 but before the operation of rule 3 (see note 2). These loans are either from colloquial Tamil or the Badaga dialect of Kannada and at times it is difficult to decide as to which of these two is the donor) language.

887. Ko. *o:l* 'palm leaf' : Ta. *o:lai*. Ka. *o:le*. (903)

888. Ko. *ku:y* 'winnowing basket' : Ta. *ku:ṭai*. Ka. *gu:de*. (1564)

889. Ko. *koł* 'tune, song' : Ta. *kołai*. (1792)

890. Ko. *ko:t* 'castle, palatial mansion' : Ta. *ko:tṭai*. Ka. *ko:te*. (1831)

891. Ko. *go:d* 'wall' : Ka. *go:de*. (1833)

892. Ko. *tod* 'throat' : Ta. *tonṭai* (2879)

893. Ko. *dɔn* 'big club' : Ka. *dɔṇṇe*. (2883)

894. Ko. *nor* 'foam' : Ta. *nurai*. Ka. *nore*. (3074)

895. Ko. *mot* 'egg' : Ta. *muṭṭai*. Ka. *motṭe*. (4048)

896. Ko. *mu:l* 'corner, direction' : Ta. *mu:lai*. Ka. *mu:le*. (4140)

897. Ko. *toyḷ* (<pre-Kota \**toḷy*) 'seed with fleshy covering inside jack-fruit' : Ka. *toḷe* (2229; the jack-tree does not grow in the higher Nilgiris).

898. Ko. *joyk* (<pre-Kota \**joky*) 'carefulness' : Ka. *jo:ke*. (2347; the vowel shortening before *y* is a normal Kota development in some contexts).<sup>2</sup>

899. Ko. *moyr* (<pre-Kota \**mory*) 'complaint' : Ta. *murai*. Ka. *moṛe*. (4113)

900. Ko. *moyr* (<pre-Kota \**mory*) 'relationship between kin' Ta. *murai* 'id., order, time, turn, etc.'. Ka. *moṛe* 'time, turn' (4115; loan from Tamil on the basis of meaning).

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<sup>2</sup>. In examples 897-900 and in some others, Ko *y* represents colloquial Tamil or Badaga *e*, which must have first changed into *i*. Such a development is found in Toda also (see 32.2). Since original \*-ay is normally lost in Kota-Toda, words with this development in these two languages must be loans. This is in agreement with our conclusion in 18.2. Such words represent a very recent layer of borrowing, i.e. they must have entered into Kota (or Toda) after the operation of rule 3.

## Heightening of Short Mid Vowels in Kannada

### 19.1. The rule.

19. 1.1. In Old Kannada, original short mid vowels (*e* and *o*) change to the corresponding high vowels (*i* and *u*) before a high vowel of the second syllable provided that the consonant in between is single.<sup>1</sup> The rule may be framed as follows:

$\left[ \begin{array}{c} - \\ \infty \\ - \\ + \end{array} \right]$	$\left[ \begin{array}{c} \text{high} \\ \infty \text{ round} \\ \text{long} \\ + \text{ vocalic} \end{array} \right]$	$\rightarrow$	$\left[ \begin{array}{c} + \text{ high} \\ \infty \text{ round} \end{array} \right] / - C \left[ \begin{array}{c} + \text{ high} \\ + \text{ vocalic} \end{array} \right]$
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(Note that words like *belli* ‘silver’, *netti* ‘forehead’, *eydu* ‘to approach’ and *tottil(u)* ‘cradle’ are not affected by this rule because they contain a consonant cluster in between the two vowels.)

In a number of cases, forms without this change also appear along with those with change. The rule seems to have

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<sup>1.</sup> This development was treated by E.H. Tuttle (1930:16), Burrow (1968:29–31), T.N. Sreekantaiya (1935), and G.S. Gai (1946 : 5-6).

operated at the Old Kannada stage only in a particular dialect which became the basis for the classical dialect.<sup>2</sup> Inscriptions before the 8th century A.D. normally contain the original forms but both types of forms occur in them from that period onwards, e.g. *idir*, *edir* 'in front', *kidisido:n*, *kedisidon* 'he who destroys' (see G.S. Gai 1946: 5-6). In verbs, the basic stem, which ends in *u* is effected by this rule whereas the past stem and the verbal nouns with a long vowel are not, e.g. *kiḍu* (< \**keṭu*; past stem *keṭṭ-*, verbal noun *kedu*) 'to be spoiled', *isu* (< \**esu*; past stem *ecc-*, verbal noun *e:su*) 'to shoot (as an arrow)' versus *biḍu* (past stem *biṭṭ-*) 'to leave'. Therefore, such bases can be reconstructed with mid vowels by means of internal reconstruction; cf. also *kisidu* 'red' but *keccane* 'red' *piridu* (mod. *hiridu*) 'great' but *perme* (mod. *hemme*) 'greatness' and *bisidu* 'hot' but *beccane* 'hot'.

The Kumta and the Havyaka dialects are not affected by this change (see 19. 4.).

<sup>2</sup>. Burrow (1968:31) says: "It thus appears that the change is only rigidly enforced in the ancient classical language and that it is often neglected in the later language. This can be explained by assuming that the development took place only in a restricted part of the Kanarese area, and that this part happened to be the district where the classical dialect was centred. Later the influence of other areas was felt in which this change had not taken place. At the same time the classical form of speech continued to exert its influence resulting in a mixture of forms".

Sreekantaiya (1935:796-797) also arrives at a similar conclusion: "It is possible that in Med. Kannada, the original radical vowel of these roots (i.e. *kedu*, *kodu*, etc.) was restored by analogy to harmonize with the unchanging *keṭṭu*, *kotṭu*, etc. But it is also possible that like *peru* and *potu* (which we have noticed already) *kedu*, *kodu*, etc. retained the original *e* or *o* through all the stages, at least in some dialects, only the basic dialects of Old Kannada being affected by the close vowel mutation."

As has been pointed out earlier (10.2.4.), Toda also shows a similar development in the case of \*e; also cf. Te. *nippu* 'fire' < \*ñerupp- (example 1098).

Examples:

- 901 (=348). Ka. *eli*, *ili* 'rat' : Ta. Ma. *eli*. (710)
902. Ka. *idir*, *idaru*, *iduru*, *edaru*, *edir*, *edur* 'that which is opposite' : Ta. Ma. *etir*. (680)
903. Ka. *esu*, *ese*, *isu* (ecc-), *ey*, *ece* 'to shoot (as an arrow) throw' : Ta. Ma. *ey*. (691).
904. Ka. *kedu*, *kidu* (*ket̪-*) 'to be destroyed' : Ta. Ma. *keṭu* (*ket̪-*). (1614)
- 905 (=350) Ka. *kivi*, *kimi* 'ear' : Ta. Ma. *cevi*. (1645a)
906. Ka. *tili*, *taṭi* 'to become clear' : Ta. *tel*, *tel̪lu*, *teṭi* (2825)
907. Ka. *bidir(u)*, *bidru*, *bidaru*, *bidanu* 'bamboo' : Ta. *vetir*. (4514)
908. Ka. *bisil*, *bisal*, *bisul* 'heat and glare of the sun, sunshine' ; *bisi*, *bisu*, *bisupu* 'heat' : Ta. Ma. *veyil*. (4540)
909. Ka. *uḍi*, *uḍa*, *uḍu*, *uḍe* 'hip, waist' : Ma. *oṭi*, *oṭuku*. (800).
910. Ka. *uli* 'to sound'; n. 'sound'; *ulipa*, *ulipu*, *ulivu*, *uluvu* 'a sound, cry' : Ta. Ma. *oli*. (837)
911. Ka. *kudi*, *gudi* 'pointed end, flag' ; *kudilu* 'sprout', 'short' : Ta. *koṭi* (1704)
912. Ka. *koḍu*, *kuḍu* (*koṭṭ-*) 'to give' : Ta. Ma. *koṭu* (1708)
913. Ka. *tuḍu*, *toḍu* (*toṭṭ-*) 'to join, put to or on' : Ta. Ma. *toṭu*. (2865)
914. Ka. "nuḍi 'to speak say,' n. 'speech, word' : Ta. *noṭi*. (3137)
915. Ka. *pudi* 'powder, dust, pollen' : Ta. Ma. *poṭi*. (3667).
916. Ka. *puruḷ* 'fitness, meaning, power, strength' : Ta. *poruḷ* 'thing, meaning, riches'. (3711).

917. Ka. *pusi* 'to lie; bear no fruit, not to attain ripeness; n. falsehood'; *pusiga* 'liar' Ta. Ma. *poy* 'to lie; n. lie'; (3702)‡

### 19. 2. Relative chronology.

19. 2.1 Even in the Old Kannada stage a vowel of the second syllable is often lost if it is preceded by *r*, *l*, *ɻ* or *ɻ̪* and followed by an obstruent, for example, *erme*, *emme* < \**erumay* 'a buffalo' (:Ta. *erumai*, 699), *eltu*, *eddu* < \**erut-* 'ox' (: Ta. Ma. *erutu*, 696), *elvu*, *elu(vu)* < \**elump-* 'bone' (:Ta. Ma. *elumpu*. 714), *kerpu*, *kera vu*), *kelahu* < \**kerupp-* 'shoe' (Ta. *ceruppu*, 1633) and *poltu*, *pottu*, *hottu* < \**polut-* 'time, sun' (: Ta. Ma. *polutu*, 3724). Since the heightening rule does not operate in such cases, we have to conclude that the vowel reduction rule is earlier to the heightening rule. In other words, the second vowel in such cases already disappeared by the time of the operation of the heightening rule.

In middle Kannada, *u* or *i* is introduced after the root in certain words and compounds, for example, *belu - diṅgaḷu* for Old Ka. *bel-diṅgaḷ* 'moonlight', *oli* 'to love' for Old Ka. *ol*. Such words also are not affected by the heightening rule because it ceased to operate by the time of Middle Kannada. Colloquial Kannada words like *tolī* 'to wash' < \**toḷe*, *henī* 'to plait' < \**heṇe* in which final *i* < \**e* are also not affected by this rule.

### 19.3. Non-operation in inflection.

19. 3.1. Finally, it should be noted that this rule does not operate in inflection (even in Old Kannada), e.g. *gelutum* 'while winning' from *gel-* 'to win' and also before the causative *-isu*, e.g. *kol-isu* 'to cause to kill and *en-isu* 'to cause to say' from *en* 'to say'.

#### **19.4. Uneffected modern dialects.**

19.4.1. The Kumta dialect of Kannada does not show the operation of the heightening rule (Upadhyaya 1976:261–262) e.g. *eli* for S. K. *ili* ‘rat’, *kemi*, *kevi* for *kivi* ‘ear’, *teļi* for *tiļi* ‘to become clear (water)’, *todi* for *tuṭi* ‘lip’, *hori* for *huri* ‘to fry’, *cedlu* for *siđilu* ‘thunder’. This evidence supports the hypothesis that the rule under discussion affected only certain dialects (see note 2, p. 265).

19.4.2. The Havyaka dialect also does not show this change (Shankara Bhat 1964): *erugu* for S. Ka. *iruve* ‘ant’, *kemi* for *kivi* ‘ear’, *teļi* for *tiļi* ‘to clear (turbid water)’, *beduru* for *bidiru* ‘bamboo’, *seđilu* for *siđilu* ‘thunder’, *besi*, *besilu* for *bisi* ‘hot’, *bisilu* *sunshine*, *todi* for *tuṭi* ‘lip’, *kodi* ‘to boil’ for *kudi*, *hođi* for *huđi* ‘powder’.

Ha. Ka. Tu. *ođu* ‘iguana’ for S. Ka. *udu*, Ta. *uđumpu*, Te. *uđumu* (DED 509) probably shows that *o* is original in this entry.

## Alternation Between Voiced and Voiceless Plosives in Dravidian

### **20.1 Plosives in Word-Initial Position**

20. 1.1 In the native element of Tamil-Malayalam, the voiced stops (i.e. *g*, *j*, *d*, *d* and *b*) are not separate phonemes. The stops in these languages are pronounced voiceless in the initial position and in doubling while they are pronounced voiced after a nasal; in the intervocalic position *k* is pronounced as a voiceless fricative [χ], *c* is pronounced as the voiceless alveolar sibilant [s] while the remaining stops are pronounced as voiced stops [*d*, *d* and *b*] but the phoneme *p* in the intervocalic position is very rare. We can generalize this statement by saying that in the intervocalic position stops have a lax pronunciation (mostly voiced but voiceless in the case of the velar and the palatal)<sup>1</sup>. In contradistinction to the Tamil-Malayalam situa-

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<sup>1</sup>. In the Tamil script, there are no symbols for voiced stops although in modern times, a symbol for *j* (along with those for *s*, *ś* and *śri:*), taken from the Grantha script, is occasionally used in writing words of Sanskrit origin. In the Malayalam script, the symbols that represent *g*, *j*, *d*, *d* and *b* are used only in writing words of Sanskrit origin but not in writing the native words.

tion, all the remaining Dravidian languages have the voiced stops as phonemically distinct from the corresponding voiceless stops even in the word-initial position. A notable exception to this is Toda which has no voiced stops in the word-initial position although in the non-initial position voiced stops contrast with voiceless stops (the later situation is due to some other developments like simplification of double (voiceless) stops and loss of a nasal before a following stop). Here the comparative Dravidianist is faced with the problem of determining whether Proto-Dravidian had phonemic voiced stops like the languages other than Tamil-Malayalam or not. Caldwell formulated the state of affairs in Tamil-Malayalam as the "convertibility of surds and 'sonants'" and maintained that Proto-Dravidian, like Tamil-Malayalam, had no voiced stops as distinct from the voiceless stops. Many later Dravidianists agreed with Caldwell on this point. Of these, mention may be made of the following scholars who discussed the problem at length and supported Caldwell's contention with concrete and convincing arguments: Burrow (1968 : 1-17), Krishnamurti (1961 : 24-29) and Zvelebil (1972). On the other hand, Sten Konow (in the *Linguistic Survey of India*, Vol. IV. (1906,) p 288) and Jules Bloch (1919) thought that Proto-Dravidian had voiced stops unlike Tamil-Malayalam; the latter scholar was also prepared to admit the possibility of voiced aspirates in the early history of Dravidian (for this he depended on Skt. *ghoṭaka-* 'horse' which seems to be from Dravidian, cf. Ta. *kutirai*, Te. *gurṭamu*, etc. DED 1423). Other scholars who held that Proto-Dravidian had voiced stops include Kuiper (1937-39), Alfred Master (1937-39), Goda Varma [(1946b) and more recently S.K. Chatterji (1954). Most of these scholars relied not on internal evidence within Dravidian but on Sanskrit words like *ghoṭaka-* 'horse', *draviḍa*, *dramiḍa*, *dramiḷa* 'the Tamilian or the Tamil land', *ghardabha* 'ass' (cf. Ta. *kalutai*, Ka. *kalte*, *katte*, Te. *gaḍida*, DED 1149)

and *garuḍa* 'the eagle, vehicle of *Viṣṇu*' (cf. Ta. Ma. *kaḷu*, *kaḷuku* 'eagle, vulture'. Tu. *karu*, *DED* 1147) which, according to them, are loans from Dravidian. In their opinion, the presence of voiced stops in such Sanskrit words indicates that when these words were borrowed by Sanskrit from Dravidian the latter had voiced stops in the corresponding words.

20. 1.2. Burrow (1968:2) gave the following four reasons for maintaining that Proto-Dravidian had no voiced stops in the word initial position.<sup>2</sup>

1. A very large percentage of the words in Kannada and Telugu beginning with *g*, *d*, etc. have nothing corresponding to them in Tamil at all.
2. Of the correspondences pointed out, a considerable number are merely late loan words in Tamil (and Malayalam) and their evidence is therefore of no value.
3. Where the correspondences are ancient there is no regularity in so far as in some cases Telugu agrees with Tamil as against Kannada and in others Kannada with Tamil as against Telugu while within both the languages, especially Kannada, there is considerable fluctuation.
4. In the case of many individual words it can be demonstrated that voicing in Kannada and Telugu is secondary;

<sup>2</sup>. Cf. Burrow (1968:16-17): "To prove the existence of initial sonants in Primitive Dravidian, it would be necessary to demonstrate that a considerable number of regular correspondences existed in which Ka. and Te. agreed in showing the voiced initial. We should expect this to appear, naturally, in many common words and verbal roots, and also to be confirmed by the remaining Dravidian languages. We find on the other hand that hardly a single common verb in the three languages satisfies this condition ..... there are practically no examples which for some reason or other do not fall under suspicion".

For the first point, he cited cases like Ka. *ga:la*, 'fish-hook' Te. *ga:lamu*; Te. *giñja* 'seed', Ka. *giñju* 'the state of being full of seeds'; Ka. *jati* 'centipede' Te. *jerri*; Ka. Tu. *jiñke* 'antelope', Te. *jiñka*; Te. Ka. Tu. *dodda* 'big'; Ka. *do:me* 'mosquito', Te. *do:ma*; Ka. *bañke* 'slime, gum, glue', Te. *banka*; Ka. *buvve* 'food', Te. *buvva*. Examples for Kannada or Telugu words with voiced stops that have been borrowed by Tamil (and Malayalam) with the devoicing of the initial stop are: Ta. *kañtam* 'chin', *keñtam* 'beard' < Te. *gañdamu*, Ka. *gañda*; Ta. *kut̪ai* 'napkin' < Te. *guñda*; Ta. *keli* 'to win' < Te. *gelucu*, Ka. Tu. *gel*; Ta. *kañtu*, *keñtu* 'fixed time, period', Ma. *gañdu* < Ka. Tu. *gañu*, Te. *gañuvu*; Ta. *callañai* 'sieve' < Te. *jalleñā*, Ka. *jallañe*; Ta. *pañña:ñi* < Ka. Tu. Te. *bañña:ñi* 'garden pea'; Ta. *pommai* 'doll' < Te *bomma*, Ka. *bombe*.

It must be remarked that the first two reasons given by Burrow are not conclusive. If a particular word does not occur in a particular daughter language, it does not necessarily mean that the word was not there in the proto-language. Such a word could have been in the pre-stage of the language and it could have been replaced by another word in the later recorded stage. Therefore Burrow's assumption that the Telugu and the Kannada words of the above two types, are "from some extraneous source" (1968:7) simply because they do not have Tamil cognates cannot be accepted. On the other hand, the remaining two reasons given by him are quite persuasive and convincing.

**20. 1.3.** As has been pointed out above, the clinching argument in favour of considering the voicing in word-initial stops in languages other than Tamil-Malayam as secondary is the absence of agreement among the various languages in showing the voiced stop in one and the same (cognate) word. Burrow (1968 : 10-14) has given a number of examples where there is

no agreement between Kannada and Telugu in the matter of showing the voiced stops. In the following examples, Kannada shows a voiced stop but Telugu shows the corresponding voiceless stop : Ka. *garuvali* 'wind', Te. *karuvali*; Ka. *giḍa*, *giḍu* 'tree', Te. *ceṭṭu* (< \**keṭṭu*), Ta. Ma. *ceti* (< \**keṭṭi*); Ka. *giḍi*, *giṇi* 'parrot', Ta. *kiḷi*, *kiḷlai*, Te. *ciluka* (< \**kiḷuka*); Ka. *guḍi*, *kuḍi* 'point, tip, banner', Te. *kodi*; Ka. *je:nu*, *te:nu* 'honey', Te. *te:ne*. In cases like the following a voiceless stop of Kannada is represented by the corresponding voiced stop in Telugu: Ka. *kalte*, *katte* 'donkey', Te. *ga:ḍida*; Ka. *ka:dal* 'love', Te. *ga:dili* 'dear'; Ka. *koḍe* 'umbrella', Te. *goḍugu*; Ka. *kunni* 'young of an animal', Te. *gunna*, *ku:na*; Ka. *kuruḍu* 'blindness'. Te. *g(r)uddi*; Ka. *kuḍi*, 'pit', Te. *g(r)oyyi*; Ka. *saṇabu* 'hemp', Te. *janumu*; Ka. *kuṛi* 'sheep', Te. *gotiya*, *gotte*.

Rarely in Telugu but commonly in Kannada, there is fluctuation between voiceless and voiced stops in one and the same word, e.g. Te. *kaḍacu*, *gaḍacu* '(time) to pass'; *kuṇṭa*, *gunṭa* 'pit', Ka. *kampu*, *gampu* 'fragrance'; Ka. *gi:ṛu*, *ki:ṛu* 'to scratch'; *gu:nu*, *ku:n(u)* 'hump'; *geṇe*, *gele*, *kele* 'union'; *ke:r*, *ge:r* 'the marking nut tree'; *daḍi*, *taḍi* 'staff'; *buṭti*, *putti* 'a basket'. cf. Ta. *ku:ṭu*, Te. Ka. Tu. *gu:ḍu* 'nest' which is most probably from the verb \**ku:ṭi*- 'to gather' which in all the languages contains *k*.

Such fluctuation is occasionally found in other languages also, for example, Pa. *cerri*, *jerri* 'centipede', *cella*, *jella* 'branch (of a tree)'; Pe. *ta:r*. *da:r* 'ant', *garnji*, *karnji* 'a kind of tree'.

**20. 1.4** There are cases in which many languages contain a voiceless stop while only one or two contains the corresponding voiced stop, e.g. (see the *DED(S)* entries for the full list of cognates):

Pa. Ga. *ba:m* 'snake' : Ka. *pa:vu*, *ha:vu*, Te. *pa:mu* (3361)

Pa. *berto* 'big' : Ka. *per*, *pe:r*, Te. *pedda*. (3613)

Pe. *gaja* 'big' : Kuvi *kajja* (S 132)

Pe. *gil* 'to sprout' : Ka. *keļar* 'to blossom' (1317)

Pe. *guhu*, *guspa* 'short' : Te. *kučuca*. (1537)

Pe. *geh-* 'to close', *gespi* 'door' : Go. *keh-*. (1648)

Pe. *boñg-* 'to boil up' : Ka. Te. *poñgu*. (3658)

Such cases also establish that the voicing is secondary.

20. 1.5. Some Dravidian words that have been borrowed by Sanskrit show a voiceless stop while a few individual Dravidian languages show the voiced stop. This situation also supports the conclusion that the voiceless stop was original, e.g. Skt, *ka:ñjika-*, *kañji*, *ka:ñcika-* 'water of boiled rice' (:Ta. *kañci*, Ma. *kaññi*, Ka. Tu. Te. *gañji*, DED 927); Skt. *kuṭi*, *kuṭa*, *ku:ṭa* 'house' (: Ta. Ma. *kuṭi*, Ka. Te. *guḍi* 'temple'; DED 1379); Skt. *palli:*, *pallika:* 'lizard' (: Ta. Ma. Ka. Tu. *palli*, Te. *balli*, DED 3294); Skt. *kuṭa-*, *ku:ṭa-* 'water pot' (:Ta. Ma. *kuṭam*, Ka. *koḍa*, *guḍuvana*. DED 1376).

20. 1.6. Comparative evidence and some times even interna evidence within a language establishes that voicing is secondary in some cases (Burrow's fourth point). In Te. *bebbuli* 'tiger' < \**perum+puli* lit, 'big tiger', *be-* is a variant of *pe(r)-* in *pedda* < \**per-da* 'big'; in this the initial *p* has been assimilated to *b* under the influence of the following *-bb-*. A similar assimilation can be found in Te. *diddu* 'to rectify' (: Ta. *tiruttu*, Ka. *tiddu*, *tirdu*); Te. *g(r)uḍdi* 'blind' (: Ta. *kuruṭu*, Ka. *kuruḍu*).

In Kannada *key* 'to do' has the variant *gey*; the voicing in the latter is due to its use as an auxiliary after another word as in *arasu-gey* 'to rule', *daye-gey* 'to grant with royal

grace', *key-gey* 'to decorate' the whole unit being considered as a compound. Similarly in Te. Ka. *gut̪i* 'mark, aim' (also Ka. *kut̪i* 'aim, to aim') the voicing is due to the use of the past adverbial participle of this verb as a postposition, cf. Ta. *kutittu*, Te. *gut̪inci*, *gu:r̪ci* 'with [reference to, concerning'].

In Telugu, voiced stops in the initial position as [in *go:ru* 'fingernail' (example 805) *d̪a:gu*, *d̪a:gu* 'to be hidden' (example 775) originally belong to the intervocalic position [from which position they were brought to the initial position by metathesis

20. 1.7. One aspect of sandhi in Old Telugu and Old Kannada is relevant to the present discussion although it was not noted by Burrow. In Old Telugu, the initial *k*, *c*, *t̪*, *t* or *p* of a Telugu (but not Sanskrit) word is optionally changed to *g*, *s*, *d̪*, *d* or *v* after a word in the nominative or that which does not end in *n*. (cf. *Bx:lavya:karaṇamu*, Sandhi sutra no.: 13), e.g.

*vā:du kotte/gotte* 'he beat (someone)'

*va:ru po:ru/vo:ru* 'they will not go'

*ni:vu teccitivi/deccitivi* 'you (sg.) brought'

*mi:ru ceppūḍu/seppūḍu* 'Tell (pl):'

Similarly, in *dvandva* compounds also, the initial *k*, *c*, *t̪*, *t* or *p* of the second member changes to *g*, *s*, *d̪*, *d* or *v* (*op. cit.* sutra no. 15), e.g.

*ku:ra+ka:ya+lu* → *ku:raga:yalu* 'vegetables'

*ka:lu+ce:yi+lu* → *ka:luse:tulu* 'hands and legs'

*talli+tanḍri+lu* → *tallidanḍrulu* 'parents' (lit. 'mother and father')

*anna+tammūḍu+lu* → *annadammulu* 'brothers' (lit. 'elder brother and younger brother').

But, after a word that ends in *n(u)*, *k*, *c*, *t*, *t* or *p* compulsorily changes to *g*, *j*, *d*, *d* or *b* (*op. cit.* sutra. no.16), e.g'

*pu:cenu+kaluvalu* → *pu:cen(u) galuvu*, 'The lilies blossomed'  
*tō:cenu+cukkalu* → *tōtcen(u) jukkalu* 'The stars appeared'  
*nannum+pilicenu* → *nannu bilicenu* 'He called me'.

Similarly, in Old Kannada also, the initial *k*, *t* or *p* of a word usually changes to *g*, *d* or *b/v* after another word (see B. Ramachandra Rao 1972: 34–38) e.g.

*pudi* 'powder' + *katturi* 'musk' > *puḍigatturi* 'powdered musk'

*gaṇdu* 'male' + *ku:su* 'child' > *gaṇdugu:su* 'male child'  
*key* 'hand' + *kannaḍi* 'mirror' > *keygannaḍi* 'hand mirror'  
*pen* 'female' + *tumbi* 'bee' > *pendumbi* 'a female bee'  
*kan* 'eye' + *tere* 'to open' > *kandere* 'to open the eyes'  
*kaṇ* 'eye' + *pani* 'drop' > *kaṇbani* 'tear drop'  
*per* 'big' + *puli* 'tiger' > *pervuli* 'big tiger'  
*to:l* 'leather' + *pulle* 'deer' > *to:lville* 'leather deer'  
*kappura* 'camphor' + *paṇuku* 'crystal' > *kappuravaṇuku*  
 'camphor crystal'

This type of alternation in the two languages indicates that the principle of 'convertibility of surds and sonants' has been inherited by them to some extent in sandhi situations. It, then, indicates that the contrast between voiced and voiceless stops in these languages is a secondary development.

20. 1.8. It is not possible to state precisely the reasons for the development of initial voiced stops in languages other than Tamil-Malayalam and Toda. The large amount of Indo-Aryan loan words with initial-voiced stops in these languages must have exerted some amount of influence on them for the

development of this process. Apart from these external factors there are some internal factors also, as pointed out by Burrow (see 20. 1.6). Krishnamurti (1961 : 28-29) also attempts to state the causes of voicing of initial stops. He notes that commonly but not always, a liquid, nasal or trill (all voiced) of the word-medial position induces the initial stop to become voiced. It must, however, be admitted that the voicing of the initial stop in all language in which it occurs is highly irregular and cannot be brought under rule.<sup>3</sup>

20. 1.9. In his 1972 paper, Zvelebil supports the conclusion of Caldwell and Burrow with the help of statistical study undertaken by his former student, Mrs. Diana Ukleja. It is clear from the statistical study that "in all the Dravidian languages without exception the percentage of words beginning with voiced stops is strikingly lower than the percentage of words beginning with voiceless stops." (*op. cit.* p. 220). The low percentage of initial voiced stops in each language, taken with the other cumulative evidence, indicates, that the voicing of initial stops was a late process that affected the languages or language groups but it was not part of Proto-Dravidian.<sup>4</sup>

<sup>3</sup>. Krishnamurti (1961:28-29) says: "While the general principle seems to be the extension to the initial voiceless stop of voicing occurring in the succeeding syllables, there are also innumerable cases where initial voicing is not produced under the same circumstances. However, voicing is more widespread in constructions which are capable of being analysed (in PDr.) into a base plus a derivative suffix than in unsuffixed stems as *kappu*, *tappu*, *tannu*, etc... *k-* is more easily influenced to alternate with *g-* than *c-* with *j-* and *t-* with *d-*; *p-* > *b-* is extremely rare..."

<sup>4</sup>. Zvelebil (1972 : 220-221) states: "The grand total, for all the items in all languages in the *DED*, is 1,499 items with initial voiced stop out of 15,961 items with initial stop, a ratio of 1:10. For South Dravidian, the ratio is 1:12, 787 out of 9,137 having initial voiced stop. In central Dravidian,

He further notes that the trend towards the voicing of initial plosives is strongest in Telugu, Kolami, Kannada and Kui while it is very weak in N. Dr.

The table showing the ranking of languages by ratio given by him on p. 222 is reproduced below (note that the ratios given are for voiced stop *versus* stop (voiced or voiceless)).

Tamil —	Brahui 1:8	Tuļu 1:5.3
Malayalam —	Gondi 1:7	Konḍa 1:5
Toda —	Parji 1:6.5	Kui 1:4.25
Malto 1:20	Naiki 1:6	Kannada 1:4
Kurux 1:15	Kuwi (F) 1:6	Kolami 1:4
Gadba 1:11	Kuwi (S) 1:5	Telugu 1:3.5
Koḍagu 1:10		
Kota 1:10		

20. 1.10. M. B. Emeneau (1969b) points to the possibility of reconstructing to Proto-Dravidian some onomatopoetic words with initial voiced stops.<sup>5</sup> Examples of such onomatopoetic

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1,256 out of 5,920 items have initially voiced stop, a ratio of about 1:5. North Dravidian has a ratio of 1:14 with 56 out of 904 items having an initial voiced stop. When consulting the ranking of languages by ratio it is obvious that it is Telugu, Kolami and Kannada which have the greatest number of initial voiced stops (ratio of voiced: voiceless being 1:4). In the next group, there are Kui, Konḍa, Tuļu and Kuvi (with the ratio approximately 1:5)."

<sup>5</sup>. He says (1969b:297). "It is probable that in reconstructed PDr. no isolated word should begin with a voiced stop except for some members of the onomatopoetic class. Tamil never writes a voiced stop in this position for any word, including those borrowings of Skt. words with initial voiced stops, many of which are pronounced voiced in Tamil, colloquial or otherwise; Malayalam sometimes indicates this voiced pronunciation. Consequently, it is not in the Tamil record, nor in the Malayalam either, what the vernacular pronunciation is

words with voiced stops in most of the languages are *DED* 1382 (\**guđuguđu-* ‘gurgling, rumbling noise); *DED* 2428 (\**dagadaga-* ‘dazzling, glowing, glittering’) and *DED* 3149 (\**bagabaga-* ‘crackling of fire’).

## **20.2. Plosives in Medial Position**

20. 2.1. In the writing systems of Tamil and Malayalam, there are no voiced plosives but single plosives that occur in the intervocalic and the post-nasal positions as well as after a non-plosive (*y*, *r*, *l*, *t*, *ɻ*) are pronounced voiced (but *k* and *c* in the intervocalic position and after a non-plosive are pronounced as *x* (voiceless velar fricative) and *s* respectively). We can make the general statement that single plosives are pronounced with lax articulation in medial position. There is difference of opinion among scholars regarding whether this was the state of affairs also at the Old Tamil stage. While Caldwell, Jules Bloch and some others maintained that the modern type of pronunciation was there even in Old Tamil, P.S. Subrahmanya Sastri (1934 : 49–57) and E.H. Tuttle (1930 : 9) argued that in the Old Tamil period plosives were pronounced as voiceless in all positions. They held this view on the basis that (i) *Tolka:ppiyam*, which describes the phonetic values of Tamil sounds, is silent on the matter of voicing of plosives and that (ii) if voiced plosives were there in the language at the time of the creation of the Tamil script from the Asokan Brahmi script, the symbols for the voiced plosives, which are readily available in the Brahmi script would also have been included in the Tamil script. Kuiper (1958:216) countered this argument by saying that the Old Tamil grammarians operated with the concept of the phoneme; even if this were true, still it is

for the onomatopoeics which have initial voiced stops in the other Dr. languages, and in reconstruction of these initials it is necessary to neglect Tamil-Malayalam.”

not clear why *Tolka:ppiyam* did not mention about the variation (even if it was subphonemic) if it really existed at that time. On the other hand, Alfred Master (1937-39) and Kuiper (1958:219-221) note that in the Greek works of the beginning of our era like *Periplus* and *Ptolemy*, the place names of the Tamil country are transcribed with medial voiced plosives, which indicates that such a pronunciation was in existence at that time. On the whole, it will be better to conclude that at the earliest stage of Tamil (i.e. when the Tamil script was devised and *Tolka:ppiyam* was written) plosives were pronounced voiceless in the medial position and later, i.e. perhaps at the beginning of our era, voiced or lax articulation of them in that position must have started.<sup>6</sup>

20. 2.2. Comparative evidence shows that in all Dravidian languages original single plosives are always voiced in the medial position (the present pronunciation of Tamil-Malayalam fits in with this situation).

Original double plosives remain always double (and voiceless) in Tamil-Malayalam but in the rest of the languages they remain double (and voiceless) after a short vowel but change to single voiceless plosives after a long vowel.

Therefore, in languages other than Tamil-Malayalam, a voiceless plosive in the medial position is always from an

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<sup>6</sup>. Jules Bloch (1919) "came to the conclusion that before the Christian era, Tamil possessed voiced plosives in initial, medial and, presumably, final positions, but that during a period, say from 100 A.C. to 1200 A.C., they were unvoiced and it was only after that date that intervocalic consonants again became voiced." (so Alfred Master 1937-39 :1003). Master refuted part of this theory by citing apart from other evidence Greek transcriptions of Tamil place names which contain intervocalic plosives which belong to the period between the 1st century and the 7th century A.D. (the Greek transcriptions are with voiced plosives).

original double plosive. In post-classical Telugu, however, *-d-* of the second syllable changes to *t* under the influence of the following *-k*, which is from *\*-kk*, e.g. Old. *aduku* 'to join' > Mod. *atuku*, Old *braduku* 'life, to live' > Mod. *batuku*, Old *aðukulu* 'beaten rice' > Mod. *aðukulu* (see Krishnamurti 1961:32). Krishnamurti (*loc. cit.*) also notes that some words of onomatopoetic origin like *citulu*, *peñulu* 'to crack, explode' have a single *t* after a short vowel as exception to the general rule. Barring such exceptions, there are no single voiceless plosives after a short vowel in any language.

20. 2.3. To establish that voicing of intervocalic (or medial) plosives is a very ancient process in Tamil, Alfred Master (1937-39) gives two important arguments: 1. Even in the earliest inscriptions, the voiced plosives of Sanskrit are represented by voiceless plosives as in *narentira* for *narendra*- 'king', *kunaparan* for *guṇabhara*-, *vayantappiri* for *vasantapriya* and *kantasenay* for *skandasena*.<sup>7</sup> 2. In Old Tamil, intervocalic *-p-* alternates with *-r-* as in *ałapu*, *ałavu* 'measurement' and intervocalic *\*-c-* is weakened to *-y-* and also is often lost as in *peyar*, *pe:r* 'name' < *\*pecar* (see 23. 2.2. for details). It is to be noted that the weakening of *\*-c-* is not confined to Tamil but is found in South Dravidian as well as in Central Dravidian. To this, Krishnamurti (1961: 31) adds the evidence of weakening of intervocalic *\*-k-* as in *\*tokal* 'skin' > *\*to:l* and that of the alveolar plosive *\*-t-* to *\*-t̪-* both of which go back to the proto-stage. This evidence clearly establishes that weakening of intervocalic

<sup>7</sup>. To this may be added the usage of voiced sounds for the original Sanskrit voiceless sounds. Zvelebil (1970:80) gives examples for this from the Pallava period: *pridhivi* for *ṛ̥thivi*-, *anekobhayah* for *anekopā:yah*, *para:bharah* for *paraparāḥ* (all in titles of kings) and *dha:nyaghaṭa(ka)* for *dha:nyakaṭa(ka)* 'a town (Amaravati)'.

plosives was there at least in the later stages of Proto-Dravidian and that this feature was inherited by all the daughter languages.<sup>8</sup>

20. 2.4. However, there is some evidence to show that in the early stages of Proto-Dravidian, plosives were not weakened or voiced as observed by Krishnamurti (1951:31). In support of this view, Krishnamurti cites the alternation of \*-c-/\*-t- in South Dravidian (see example 1035) and the palatalization of -k- before front vowels in Tamil as in *arici* 'rice' < \**ariki* (see 22. 2.3) both of which must have taken place before the sounds concerned became voiced. To this, we may add two more reasons that are stronger than it. One is the evidence of Sanskrit words of Dravidian origin containing voiceless plosives in the medial position, e.g. *ketaka-*, *ketaki:-* 'fragrant screwpine' (DED 1685), *kuṭi-*, *kuṭi:-* 'house' (1379), *kuṭi:* 'intoxicating liquor' (1378), *kuṭa-* 'waterpot' (1376), *ka:ñcika-*, *ka:ñji:-* 'water of boiled rice' (927) and *kaṭa:ha* 'a young female buffalo whose horns are just appearing' (943). The Dravidian language(s) must have had medial plosives with voiceless articulation at the time when such words were borrowed by Sanskrit.

20. 2.5. The second and the strongest of all the three pieces of evidence comes from Kannada. This language has precious evidence to show that originally stops in the intervocalic position were not weakened. Even in the earliest stages of that language, the derivative vowel between *r/l* and (P)P/NP is often lost and during [the historical period *r/l* is as similitated

<sup>8</sup>. To account for the occurrence of voiceless plosives after a nasal in Kannada (e.g. *enṭu* 'eight'), Telugu (e.g., *impu* 'sweetness) and other languages, Krishnamurti (1961:31-33) said that the voicing of medial plosives is regular in the root syllable but irregular in the suffix syllables. N. Kumaraswami Raja (1969a, b) later demonstrated that to makes such a distinction is unwarranted (see Chapter 21).

to the following P. The resulting geminate is always voiceless in the case of original (P)P but it is voiced in the case of the original NP (cf. Ka. *mardu*, *maddu* < \**marunt-*, example 1084; also cf. DED 3540, 3861, 4442, 4457). From this, we can surmise that in the pre-Kannada stage original -P-, like -PP-, was voiceless while the P in NP was voiced. The Kannada evidence is also buttressed in some cases by evidence from Kota-Toda, Koḍagu, Tuḷu and even Gonḍi. On the basis of this evidence, we can conclude that Proto-Dravidian had had a stage at which intervocalic sotps were not weakened and that weakening (or voicing) of the stops first started in NP clusters and later spread to the intervocalic position. Examples:

Ka. *akki* 'rice' (Ko. *aky*, To. *asky*, Koḍ. Tu. *akki* < \**ariki*, 178); the Kannada past stem *uḷt-*, *utt-* (Ko. *uṛt-*, To. *uṣt-*, Koḍ. *utt-* < \**uḷu-t-*) of *uḷ* 'to plough' (example 781); Ka. *elṭu*, *ettu* 'ox' (Ko. *et*, To. *est*, Koḍ. *ēttī* < \**erut-*, example 346); Ka. *poltu*, *portu*, *pottu*, *hottu* 'time, sun' (Ko. *port*, To. *pi st*, *post*, Tu. *portu* < \**pōlūt-*, example 799); Ka. *alti*, *matti* 'Terminalia tomentosa' (Tu. *matti* < \**marut-*, 3861) and Ka. *berku*, *bekku* 'cat' (To. *pešk*, Koḍ. *bekkī*, Go. *verka:r* < \**veruk*, 4520). Now it is clear that Ka. *taḷgu*, *targu*, *taggu* 'to be low' (2597) is from \**tal-unk-* but not from \**tal-uk-*.

### 20.3 Pros and Cons of Emeneau's Proposed Notation

20. 3.1. Emeneau (1967a:372, also 1970b) proposed that for Tamil-Malayalam medial single (voiced) plosives can better be represented by *g*, *j*, *d*, *t*, *b*, *p* (rather than by *k*, *c*, *f*, *t*, *p* as is usually done) and medial double (voiceless) plosives by (single) *k*, *c*, *f*, *t*, *p* rather than by the corresponding double plosives. He is of the opinion that this yields simpler morphophonemics and easier comparative statements "since Tamil-Malayalam morphemes now have phonemes closely paralleled by

those of the equivalent morphemes of the other languages, and PSDr. and PDr. have the same symbols as those used for all the languages" (1967a:372). This statement implies that Emeneau wants to use this new notation even for reconstructed forms. Recently also, he reiterated this view in his review of Zvelebil 1970 (1973:79) "... I have the feeling that if it were not for the overwhelming weight and prestige of the traditional Tamil (and Malayalam) writing system, comparative Dravidian studies would have easily reached on the basis of all the other languages and adopted the notation that I prefer (i.e. with -d- and -t- instead of -t- and -tt-), with its economy of comparative statement." In this connection, it is relevant to consider the following points.

(i) It is not entirely clear how the new notation yields simpler morphophonemics in Tamil-Malayalam. On the contrary, this will give rise to some additional complications.

For example, in verbs of the type (C)V<sup>k</sup>k/t/tu, which have past stems in (C)V<sup>k</sup>k/t/tu, Emeneau proposes that the past suffix is -tt- (which he writes -t-) rather than -t- (which he writes -d-) and says that this accounts for the resultant voiceless sound in a better way. If we restrict our analysis only to the past stem, we can do this even in the traditional notation. However, if we take the whole inflectional variations of these verbs into consideration, this analysis looks odd because these verbs which take weak suffixes in all other cases would be having the strong suffix only in the past. The concerned morphophonemic change is undoubtedly of Proto-Dravidian and it must have taken place when the medial plosives were still voiceless (see Subrahmanyam 1971 : 190-194).

(ii). The phonetically double (and voiceless) plosives of Tamil-Malayalam have the same correspondence after a short vowel in many other languages although after a long vowel they become single voiceless plosives in them. To represent them with single voiceless plosives after a short vowel in Ta.- Ma. is therefore unwarranted from the point of view of comparative Dravidian. We can not extend this way of writing to Telugu or Kannada, for example, because in these languages there are loanwords from Indo-Aryan and other sources with single voiceless plosives after a short vowel, for example, cf. Te. *paḍu* 'to fall', *paṭṭu* 'to hold' and *patu* (<Skt.) 'strong'. Moreover, in the languages other than Ta.-Ma. voiced plosives and many non-plosives have single *versus* double contrast after a short vowel and this makes giving sub-phonemic status to the doubling of voiceless plosives alone unjustified. Emeneau (1970b:145, end of footnote1) noted these problems in Koḍagu but still he used the new notation in that paper. I feel that the incongruence in the pattern of even the native material that is brought about by the new notation is too serious to be ignored. Added to this is the practical problem of writing loanwords with voiceless plosives in medial positions.

(iii). The new notation will have lenis voiced plosives contrasting with voiceless plosives only in the non-initial position and this obliterates the important generalization that lenition (or voicing) is predictable. That generalization, which represents the native speaker's intuition is more fundamental than the generalization achieved by the new notation that doubling is predictable.

(iv) It has been shown above (see 20. 2.4-5) that there is a possibility that at least in the early stages of Proto-Dravidian, lenition (or voicing) of medial plosives was not there. The new notation, when applied to Proto-Dravidian, closes

the door once for all for this possibility. Moreover, we can not be certain whether to represent intervocalic \*-k- of the usual notation by -x- (as in Ta. Ma. To.) or by -g- (as in the rest of the languages); \*c has to be written s intervocally but j after n. All this involves assertion of phonetic details of the proto language about which we know precious little.

All the above discussion makes it evident that it is far advantageous to stick to the traditional type of notation.

## Nasal Plus Double Plosive in Proto-Dravidian

### 21. 1. NP Versus NB in Languages Other Than Tamil-Toda.

21. 1.1. In Tamil-Malayalam a plosive after a nasal is invariably voiced in pronunciation and a double plosive will not occur in this position. In Kota-Toda, all cases of nasal plus a voiceless plosive are the result of dropping of the intervening vowel, for example, Ko. *onk-* 'to dry (tr.)'; To. *wiŋk-* < Proto-Ko.-To. \**onakk-* (cf. Ta. *uṇakku*, DED 517). Kodagu contains a few such cases but some of them are loans from Kannada, as *kunṭē*, 'lame man'; fem. *kunṭi* (< Ka. *kunṭa*, *kunṭi*, DED 1408) while others are due to the loss of the intervening vowel as in Kota-Toda, for example, *innatē*; *intē* 'of this', (DED 351). On the other hand, languages other than Tamil-Malayalam-Kodgu-Kota-Toda contain innumerable cases of a nasal followed by a voiceless plosive; this sequence is in contrast with the sequence of a nasal followed by a voiced stop, as in Te. *maṇḍu* 'to burn' versus *maṇṭa* 'flame'; *paṇḍu* '(crop) to yield, n. fruit' versus *paṇṭa* 'crop'; Ka. *maṅka* 'dull person' versus *maṅga* 'monkey'; *gaṇṭu* 'knot, pocket' versus *gaṇḍu* 'male'.

**21. 2. \*NPP > Ta.-To. \*PP; others NP.**

21. 2.1. If we reconstruct \*NP as the source for the correspondence, Ta. NP, Ma. NN/NP:Ka. Te. (and many others) (N)B (as found in Ta *panti*, Ma. *panni*, Ka. *pandi*, *handi*, Te. *pandi* (example 28); Ta. *ponku* 'to bubble up', Ma. *ponnu*: Ka. Te. *poñgu* (example 975) and Ta. *mu:n̪tu* 'three', Ma. *mu:n̪nu*: Ka. *mu:n̪u*, Te. *m̪i:du* (example 340) it will be necessary to reconstruct something other than \*NP as the source for the correspondence Ta. Ma. PP : Ka. Te. (and many others) NP (N = Nasal, P = voiceless plosive and B = voiced plosive). N. Kumaraswami Raja (1969a, b) proposed that the sequence \*NPP must be reconstructed as the source for the latter correspondence. He rejected the explanation given by Krishnamurti (1961:31-33, 71) for this process that voicing of (single) plosives in derivative suffixes is not uniform in languages other than Tamil-Malayalam and that in Ta.-Ma. the nasal before a plosive is completely assimilated to it in some cases. As Kumaraswami Raja (1969b; 70-98) has amply demonstrated, the reconstruction of \*NPP gives a natural explanation for a number of morphophonemic alternations that appear to be unmotivated at the surface level in Tamil-Malayalam as well as in some others.

21. 2.2. Although Kumaraswami Raja did not concern himself with Koñagu, Kota and Toda, it must be noted that they also go along with Tamil-Malayalam in this respect as will be clear from the following examples. The nasal in PDr. \*NPP is lost in Tamil-Malayalam-Koñagu-Kota-Toda resulting in \*PP in this group while in the rest of the languages it yields NP with the simplification of \*PP to P (voiceless but not voiced plosive).<sup>3</sup> For the sake of clarity, the differences in

<sup>3</sup>. Kumaraswami Raja, in a recent paper (1980a) has shown that the development \*NPP > PP is not a case of merely dropping the N. Words like *tai̯pam* 'coolness' < \*tan-ppam (cf.

the development of the three similar proto phonemic sequences are given below.

- (i) \*PP : Ta. Ma. PP; Ka. Te. (and some others) PP  
(after a short vowel); P (after a long vowel); Ko. To. P.
- (ii) \*NP : Ta. NP; Ma. NN/NP; others (N)B.
- (iii) \*NPP: Ta.-Ma.-Ko~~d~~. PP, Ko. To. P, others NP.

The change \*NPP > \*PP must have taken place at the proto stage of Ta.-Ma.-Ko~~d~~.-To.; there are other evidences to posit an exclusively common proto stage for these five languages (see Subrahmanyam 1971:516).

Examples for cases that require the reconstruction of \*NPP:

918. Ta. Ma. *eṭṭu* 'eight'. Ko. *eṭ*. To. *ōṭ*. Ko~~d~~. *ēṭṭī*. Ka. *enṭu*. Tu. *enma*. Te. *enimidi*, Go. *aymūr*, *aymul* (PDr \*en- but Proto-Ta.-Ka. \*en-*tt-* < \*en-*tt-*; cf. Ta. Ma. *en-patu* 'eighty', *en-nu:tu* '800', *en-mar* 'eight persons'; the *-tt-* in \*en-*tt-* is the neuter suffix; 670)

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*tan* 'cool') and *teŋku* 'south' < \*teŋ-*kku* (cf. *teŋ* 'south') show that the N is first converted into the homorganic plosive and then PP is simplified to P after N. He has further argued that in three consonant clusters (in Tamil), the second consonant is the one that gets lost. Evidence for this comes from words like *enpu* 'bone' and *no:ŋpu* 'ceremonial fasting', *enpu* < \*en-*mpu* < \*el-*mpu* (cf. Ma. *ellu*, *elumpu* 'bone', 714) and *no:ŋpu* < \*no:*n*-*mpu* < \*no:*l*-*mpu* (cf. Ta. Ma. *no:l* 'to endure', 3147). In these, first *l* changes to *n* before *m* and later the *m* is dropped. From this, Kumaraswami Raja generalizes the development by saying that what is lost in a three consonant cluster is the second consonant. The following two ordered rules derive PP from \*NPP (L = lateral; subscript *h* means 'homorganic').

- (i)  $\left\{ \begin{matrix} L \\ N \end{matrix} \right\}_h \rightarrow P_h / -PP$
- (ii)  $\left[ \begin{matrix} N \\ P \end{matrix} \right]_h \rightarrow \phi / \left[ \begin{matrix} N \\ P \end{matrix} \right] - P_h$

919. Ta. *kaṭṭi* 'clod, lump, tumour'. Ma. *kaṭṭa* 'lump'; *kaṭṭi* 'solid'. Ko. *kaṭy* 'solid lump'. Ka. *gaṇṭe*. (< \**kaṇṭṭ-*; 962)

920. Ta. *kalakkam*, *kalakku* 'being agitated (as surface of water), discomposure'. Ma. *kalakkam* 'turbidness, confusion', *kalakku* 'muddy water'. Ko. *kalk* 'muddy (of water)'. To. *kašk*. Ka. *kalaku* 'turbidness'. Tu. *ka!anKİ*. Te. *kalāka*, *kalākuva* (< \**kalaṅkk-*, verbal noun from \**kalaṅk-* 'to be stirred up'; the nasal in Kannada must have been lost later, cf. the verb *kalaṅku* tr. 'to make turbid, stir'; 1096).

921. Ta. *i:ṛtu* 'bringing forth (applied to animals), young one brought forth'; *i:ṛtam* 'giving birth'. Ma. *i:ṛtam* 'the womb of animals'; *i:ṛtu* 'bringing forth, young of animals'. Ko. *i:tl may* '(woman or buffalo) which having borne once or twice is barren (*may*) thereafter'. To. *i:tl* 'slime passed in dysentery or by buffalo during calving'. Te. *i:ta* bringing forth young' (< \**i:n̩l-*, verbal noun of \**i:n̩-* 'to bring forth'; 473).

922. Ta. *karrai* 'collection, bundle', Ma. *karr̩a* 'bundle (as of grass, straw)'. Ka. *kante*. (< \**kaṇṭṭ-ay*. 1178)

923. Ta. *tep*, *teṛku*, *tekku* 'south'. Ma. *ten*, *tekku*. Kod. *tekki*, *tēkki*. Ka. *teṅka(l)*, *teṅku*, *teṅkalu*, *teṅku*. Tu. *tenika:yi*, *tenkayi*, *teṅka:yi* (< \**teṇ-kk-*). 2839).

924. Ta. Ma. *to:ṭṭam* 'garden'. Ko. *to:ṭṭm* 'fenced field'. To. *twi:ṭṭm* 'garden'. Kod. *to:ṭa*. Ka. *to:ṭa*, *to:nṭa*; *to:ṭiga*, *to:nṭiga* 'gardener'. Tu. *to:ṭa* 'garden'. Te. *tō:ṭa*. Ga. (Oll.) Kuwi *to:nṭa* (< \**to:nṭt-am*, verbal noun of \**to:nṭ-* 'to dig, burrow' 2927).

925. Ta. *pokkam* 'lie, falsehood'. Ka. *boṇku* 'to lie'. Tu. *boṇku-* 'to deny'. Te. *boṇku* 'to lie; n. a lie' (< \**poṇkk-*; 3651)

926. Ta. *ve:ṭṭam*, *ve:ṭṭai* 'hunting'; *ve:ṭṭu* 'occupation of hunting'. Ma. *ve:ṭṭa* 'hunting'. Ko. *ve:ṭ*. To. *pe:ṭ*. Kod. *bo:ṭe* Ka. *be:ṭe*, *be:nṭe*; *be:nṭiga* 'hunter'. Tu. *be:nṭe*, *bo:nṭe*, *be:ṭi* 'hunting' Te. *vē:ṭa*, (< \**ve:nṭt-(ay)*; 4547)

### 21. 3. Explanation of Morphophonemic Alternations.

21. 3. 1. As has been pointed out by Kumaraswami Raja (1969b, Chapter 6) positing of \*NPP for PP in the Tamil-Toda group will account for several morphophonemic alternations in a natural way. A few of them are illustrated below. The intransitive NP: transitive PP relationship can now be viewed at the deep level as intr. NP: tr. NPP, as in *\*aṭan̩k-* 'to be subdued'; *aṭakk-* (*\*aṭan̩kk-*) 'to subdued'. This will be in perfect agreement with the relationship — intr. P: tr. PP as in *a:t-* 'to move (Intr.)'; tr. *a:t̩t-*. The plosive is doubled in the transitive in both the cases and originally this was the only change; the disappearance of the nasal in the former is a later development. The Kannada transitives with NP like *kalaṅku* 'to perturb' (:Ta. Ma. *kalakku*, DED 1096), *tirumpu* 'to cause to go round' (:Ta. Ma. *tiruppu*, DED 2655) and *tu:ṅku* 'to weigh, swing' (:Ta. Ma. *tu:kku*, DED 2777a) prove beyond doubt that there was the nasal in the transitive too where the corresponding intransitive has it (see Subrahmanyam 1971, chapter 1). The same interpretation holds good in the case of verbal nouns that show PP corresponding to NP in the underlying verb in Tamil-Toda (see examples 920, 921, and 924). Adjectival forms of nouns ending in NP<sub>u</sub> change the NP to PP at the surface level in Tamil-Toda, as in Ta. *pa:mpu* 'snake', adj. *pa:pp(u)+uri* 'snake's slough'. This PP is NPP at the underlying level so that *pa:pp* < *\*pa:mpp-*; cf. Te. *pā:pa rē:du* 'king of serpents' in which the nasal is present. Now it is clear that the process of adjective formation in such nouns is the same as that found in nouns ending in a single plosive (plus *u*) as in *ka:t̩u* 'forest', adj. *ka:t̩tu*; the loss of the nasal is a subsequent development.

## 22. 1. \*k-.

22. 1.1. PDr. \*k- in the initial position remains unchanged in all languages except Tamil-Malayalam, Telugu and the three North Dravidian languages, Kuyuk-Malto and Brahui.<sup>1</sup> In Tamil-Malayalam, \*k- is palatalized to c- before a front vowel (i.e. i, i:, e or e:) that is not followed by a retroflex.<sup>2</sup> The rule may be stated as follows.

$$k \rightarrow c / \# - \left[ \begin{matrix} + & \text{vocalic} \\ - & \text{back} \end{matrix} \right] \left[ \begin{matrix} + & \text{consonantal} \\ - & \text{retroflex} \end{matrix} \right]$$

As is evident, the change is absent if the front vowel is followed by a retroflex in Tamil-Malayalam. A front vowel in

<sup>1</sup>. Burrow's third article (1968:32-64) contains a comprehensive treatment of the developments of PDr. \*k.

<sup>2</sup>. This rule was first formulated by Ramaswami Aiyar (1931) and A.F. Thyagaraju (1932). Burrow assigned his change in Tamil to the period between the 3rd century B. C. and the time of the earliest Tamil literature. He based his view on the fact that the word *kerala* first appears in the inscriptions of Asoka in the compound *keralaputra*, which is a literal rendering of Ta. *ce:ram:η* (*ma:η* < *makanη* 'son'), which shows palatalization unlike the former word.

many Dravidian languages has a centralised allophone before a retroflex and this type of allophone prevented the palatalization in Tamil-Malayalam although it does not do so in Telugu.

The same change takes place in Telugu also, but the conditioning factor in the case of Telugu is more generalized. \**k*- changes to *c*- in Telugu before a front vowel (even if the latter is followed by a retroflex). Moreover, this change takes place in Telugu even before the *e*: that is from \**ay* (see examples 942–944). From this, it is clear that the change \**ay* > *e*: antedates the change of palatalization in Telugu. The concerned rules for Telugu may therefore be stated in the following order:

1. *ay* → Te. *e*: / #(C) —
2. *k* → *c* / # — [ + vocalic ]  
— back

Because of these two differences between the palatalization rule of Tamil-Malayalam on the one hand and that of Telugu on the other, Burrow (1968:45) concluded that the Telugu development is independent of the development in Tamil-Malayalam. This conclusion is further strengthened by the fact that while in Tamil palatalization had operated well before the time of *Tolkaappiyam*, some Telugu inscriptions of the 8th century A.D. contain non-palatalized forms, which perhaps indicates that at that time there were some regional Telugu dialects that were not yet affected by palatalization, e.g. *ke:si*, *ke:siri* for later *cetsi* ‘having done’ and *ce:siri* ‘they did’ respectively. As noted by Krishnamurti (1961:10) palatalization affected Telugu after the operation of metathesis as is evident from cases like *kri:-*, *krinda* ‘below’ (example 786) which would have been affected by palatalization if they were not already affected by metathesis. Moreover, palatalization is absent in Telugu in cases where the \**k*- has already become

voiced *g-* (see examples 927, 928 and 933). Since palatalization in Telugu postdates the voicing of initial plosives and metathesis, it is obvious that it is not genetically connected with the similar change in Tamil. However, we may think of areal influence of Tamil on Telugu in this matter.

Examples:

927. Ta. Ma. *kiṭṭu* 'to draw near (in time or place); *kiṭai* 'to be obtained, To. *kiṭ-* 'to be caught (in crowd, by buffalo's horns, by promise, etc.)'. Ka. *kiṭṭu* 'to touch, be obtained'; *giṭṭu*, *gi:ṭu* 'to be obtained, be pressed closely one to the other'. Kod. *kiṭṭ-* 'to be got'. Tu. *kiṭṭa* 'proximity'; *giṭṭa* 'proximate, near'. Te *giṭṭu* 'to be agreeable or favourable, suit, agree, meet with'; *kiṭṭu* 'to approach, agree, suit'. Malt. *kiṭe* 'near'; *kitr-* 'to approach'. (1287)

928. Ta. *kinnam*, *kiṇṇi* 'small metal cup, clepsydra'. Ma. *kiṇṇam* 'metal plate, gong'. To. *kiṇṇm* 'metal eating vessel', Te. *ginniya*, *ginne* 'cup, bowl, goblet'. (1291)

929. Ta. *citar* 'to scatter, n. spilling, pollen, powder'; *citaṛu* 'to scatter'; *citai* (-v-, -nt-) 'to be scattered'; (-pp-, -tt-) 'to scatter (tr.)'; *cintu* 'to be spilled'; *ci:ntu* 'to scatter'; *cetil* 'dust'. Ma. *citar* 'dust'; *citaṛu* 'to be scattered'; *cintu*, *cinnu* 'to be scattered'; Ko. *kid-* 'to sprinkle from ends of fingers'. To. *kid-* 'to sprinkle'. Ka. *kedaṛ(u)*, *cadaru* (l.w.), *cedaru* (l.w.) 'to be scattered about'; *kedaṛ* 'state of being scattered'. Tu. *kedari-*, *cadari-* (l.w.) 'to be scattered'. Te. *cedaru* 'to be scattered'; *ciduku* 'to spill or run out'; *cindu* 'to be spilt or shed'. Kur. *kidg-* 'to drizzle'; (Hahn) *kid'g-* 'to rain, spray'. (1294)

930. Ta. *cital*, *citalai* 'termite, white ant'; *cel* 'white ant' Ma. *cital*, *cital*, *cetal* 'termite'. To. *kez,al* (<Ka.). Ka. *gedal*,

*gejjalu, geddali, geddulu*. Ko $\ddot{\text{o}}$ . *kede* ‘white ant’. Te. *ceda, cedalu*. Kol (Kin.) *ceda* (< Te.). Nk. *śedal* (< Te.). (1296).

931. Ta. *cirañku* ‘pimple, itch’ Ma. *circinū*. Ka. *keraku* ‘scab’. Tu. *kirmbu-*, *kirmbari-* ‘to itch, rub, scratch’; *kerani*, *k(e)ra:ṇi* ‘kind of scab, warts’. (1302)

932. Ta. *cil* ‘some, few, small’; *cilar* ‘a few persons’; *cila* ‘a few’; *cilku* ‘to become few, dwindle’; *cillai* ‘humbleness, meanness,<sup>3</sup> *cipam* ‘fewness’; *cimai* ‘smallness, fewness’. Ma. *cila* ‘some, several’. Ko. *kil gat-* (gac-) ‘to be too small for one’s years’. To. *kīṣf* ‘a few’ Ka. *kela* ‘a few’; *kelavu* ‘some things’; *kelabar* ‘some persons’. Tu. *kela, kelavu* ‘some’. Te. *cilipi*; ‘small, slight, despicable’ *cilupa* ‘slight, little’. (1308)

933. Ta. Ma. *killu* ‘to pinch, nip’. To. *kiLy-*. Ka. *gindu*. Tu. *kinkī-*, *kinki-*. Te. *gillu*. (1322)

934. Ta. *cina* ‘to be very angry’; *cinappu, ciṇam* ‘anger’; *cinavu* ‘to be angry, fight’. Ma. *cinam* ‘wrath’; *cinippu* ‘anger’. *cini-*, *cinañnu* ‘to be touchy’. To. *sinn* (< Ta) ‘anger, grudge’. Ka. *kinisu* ‘to be or become angry; n. anger’. Te. *kiniyu* ‘to be angry’; *kin(ū)ka, kinupu* ‘anger’ (all < Ka.). (1332)

935. Ta. *ci:* ‘pus, snot’; *ci:l* ‘pus’; *ci:kkai* ‘phlegm’; *ci:tam* ‘slime or mucus voided in dysentery’; *ci:ttai* ‘rotteness’. Ma. *ci:-* ‘to rot, be spoiled’; *ci:* ‘putrid matter, secretion of eyelids’; *ci:kku* ‘rotten’; *ci:ccal, ci:yal* ‘rotteness, caries’. Ko. *kiv* ‘pus, ear-wax’; *kit-* ‘to rot, (wound, corpse) decays and stinks’; *giṇ* ‘snot, dirt, esp. excrement’. To. *kitil* ‘rotten’. Ka. *ki:* ‘to become pus, become putrid’; *ki:vū, ki:va, ki:mu* ‘pus’. Ko $\ddot{\text{o}}$ . *ki:y-* ‘to become rotten’. Tu. *ki:vū* ‘pus’. Te. *ci:ku, civuku* ‘to rot’; *ci:mu* ‘pus’, *ci:midl* ‘snot’; *ci:da* ‘any disease of animals or plants’. Kol. *sivk-* ‘to become rotten’; *si:m* ‘pus’; (Kin) *ci:mur* ‘nasal discharge’. Nk. *si:m* ‘pus’. Mand. *hi:ven* ‘pus’. Kui. *si:venđi, si:venji*, (K) *hi:venji* ‘pus’; *sri:-*, (P) *srih-* ‘to

rot, decay'. Kuwi (Su.) *si:mesi* 'pus'; *sri-* 'to become bad, rotten'; (*D*) *si:vendi* 'pus'. Kur. *kitt-* 'to rot'. Malt. *kit-*; *kitro* 'rotten' Br. *ki:sh* 'pus, snot'. (1337).

936. Ta. Ma. *keṭu* (*keṭuv-*, *keṭṭ-*) 'to be destroyed' · (-*pp-*, -*tt-*) 'to destroy'; *keṭṭa* 'bad'; *keṭuti*, *keṭu* 'ruin'. Ko. *keṛ-* 'to die, be ruined'; tr. *kerc-*; *ke:r* 'ruin'. To. *köṛ-* 'to be spoiled'; *körc-* 'to kill; by witch craft'; [*körθil* 'misfortune'; *köṛγ* 'corpse, funeral'. Ka. *kiḍu*, *kedu* (*keṭṭ-*) 'to be destroyed'; tr. *keḍisu*, *kiḍisu*; *keṭṭa* 'bad'; *keḍaka*, *keḍuka* 'a bad man'; fem. *keḍaki*; *keḍuki*, *keḍuha*, *ke:ḍul* 'ruin'. Ko<sub>d</sub>, *kēd-* 'to be spoiled'; tr. *kēdīt-*; *kē:di* 'ruin'. Tu. *keḍagī-* 'to spoil'; *keḍuku*, *keḍa*, *kedakī* 'damage, loss'; *keṭṭa* 'bad' *ke:ḍi* 'evil, Te *ceḍu* 'to be destroyed'; *cedḍa*, *cedu* 'bad'; *cetṭa*, *ceḍugu*, *ce:ḍu* 'harm'; *keḍayu* 'to die' (<Ka.); *keḍapu* 'to kill' (<Ka.); *ceracu* 'to destroy'. (1614)<sup>3</sup>

937. Ta. Ma. *cey* 'to do, make'; *ceyti* 'deed, news'. Ko. *gey-*, *key-* 'to do, make'. To. *kiy-* Ka. *key*, *gey*; *keyta*, *geyta*, *keyme*. *geyme*, *ge:me* 'doing, an act'. Ko<sub>d</sub>. *key-* 'to do'. Tu. *gey-*. Te. *ce:yu*; *ce:ta* 'action'. Ga. *key-* 'to do'. Go. *ki:-*. Pe. Mand. *ki-.* Kui-. *ki*, *gi-*. Kuwi (Su.) *ke:p-*, *pe:k-*; *ki-* causative auxiliary. Br. *kann-* (stems *ka-*. *kar-*; pres. *ke:-*) 'to do, make'. (1628).

938. Ta. *ceruttal* 'udder', Ma. *cerunnal*, *cerannal*, *curannal*, *corunnal*. Ko. *kecl*. To. *kefṣ*. Ka. *keccal*. Tu. *keñjeli*, *kerndeli*, (1632)

939. Ta. *ceruppu*, 'sandal, slipper, shoe'. Ma. *cerippu*. Ko. *kevr*. To. *kerf*. Ka. *kera(vu)*, *kerahu*, *kerpu*. Te. *ceppu*. Kol. Nk. *kerri*. Nk. (Ch.) *keri*, *kerig*. Pa. *cerup*, *cerpu*, Go. *sarpum*,

<sup>3</sup> The Te. Kol. Nk. Nk(Ch.). Pa. Ga. forms that look to \**kitt-* (Te. *giṭu* 'to die, perish' etc.) do not belong to this entry, and therefore they have to be given as a separate entry.

(W) *sarpo*, (M.) *harpunj*, (L) *helpus*, (A) *serpu:m* (all < pre-Te.). Kuwi. *seppu* (<Te.). Kur. *kharpa*: ‘straps (without sole) crossed over and worn round the ankle’. (1633).

940: Ta. *cetmpu*, *ce:mpai* ‘Indian kales, colocasia antiquorum’. Ma. *ce:mpu*, *ce:mpa*. Ka. *ke:save*, *kesu*, *ke:su*, *kesa(yu)*. Tu. (B) *se:vu*, (C) *cetvu*, *te:vu*. Te. *ce:ma*. Pa. *ki:bi*. Ga.(P) *kiyub*. Kur. *kisgo:*. (< PDr. \**kec-(amp-)*/\**kic-(amp-)*; 1667).

941. Te. *ce:ṭa* ‘winnowing basket’. Kol. Nk. Nk. (Ch.) *ke:t*, Pa. *ke:ti*, (NE) *ke:ṭi*. Ga. (Oll.) *ke:ṭi(n)*, (S) *ke:ṭen*. Go. *se:ti*: (Mu.) *he:ti*, (Koya.) *e:ti*. Konḍa *seṭRi* Pe. Mand. *he:ci*. Kui. *se:si*. Kuwi *he:ci*. Kur. *ke:ter*. Malt. *'ke:tnu..* (< \**ke:ṭt-*; see example 604 for the underlying verb *\*ke:ṭt-*; 1679).

942. Ta. Ma. *kai* ‘hand, arm’. Ko. *kay*. To. *koy*. Ka. *kay key*. Kod. Tu. *kay*. Te. *ce:yi*. Kol. Nk. Nk (Ch.) *ki:.* Pa. *key*. Ga. (Oll.) *ki*, (S) *kiyyu:.* Go. *kay*, Konḍa *kiu*. Pe. *key*. Mand. *kiy*. Kui. *kaju*. Kuwi (Su.) *keyyu*, (P) *kayyu*. Kur. *xekkha:*. Malt. *qeqe*. (1683).

943. Ta. *kaya*, *kaca*, *kai* ‘to be bitter’; *kayappu*, *kaippu*, *kacca* ‘bitterness’; *kayar*, *kacar* ‘astringency’. Ma. *kai-*, *kaśa-* ‘to be bitter, be disliked’; *kaippu*, ‘bitterness, grudge’. Ko. *kac-* ‘to be bitter’. To. *koy-*. Ka. *kay(yi)*, *kaypu*, *kayne* ‘bitterness’; *kasar* ‘scratch the throat, be astringent’; *kasa(ru)*, *kasaku* ‘astringency, unripeness’. Kod. *kay-* ‘to be bitter’; *kayne* ‘gall-bladder’. Tu. *kayne*, *kaypeli* ‘bitterness’; *kasaka:yi* ‘half-ripe’. Te, *kasū(ga:ya)*; *kasuru* ‘unripe (fruit)’; *cē:du* ‘bitterness’. Kol. *se:nd* (< Te.). Nk (Ch.) *kayek* ‘unripe’. Pa. *ke:p-* (*ke:t*) ‘to be sour or bitter’; (S) *kay-gaṭṭa* ‘bile’. Ga. (S) *ke:mbur*, *keymbur* ‘bitter’. Go. *kehke:.*; *kayt-* ‘to taste bitter (as quinine)’; (M) *kaita:* ‘bitter’ (A.) *kaymu:l*. Pe. *ke-* ‘to be bitter’. Mand. *kembel* ‘bitter’. Kui (K) *kappeli*. Kuwi *kambeli*. Malt. *qas-* ‘to become bitterish, insipid or vapid’. (1047).

944. Ta. *kayal*, *ce:l* 'carp' Ma. *kayal* 'a fish, *cyprinus*'; *kayyan* 'a river fish'. Te, *cẽ:pa*, *kakka* 'fish'. Kol. *kaye*, (A) *ki:ke* Nk. Nk (Ch.) *kayye*. Pa. *key*. Go. (Mu. Ma.) *ki:ke* '(a small) fish.' (1050)

945. Ta. *kayiru* 'rope, cord, string'. Ma. *kayaṟu*, *kayal*; *cakari*, *cekari*, *ce:ri* 'coco-nut husk and fibres'. Ko. *ki:r-na:n*; 'rope'. Koḍ *ke:ri* *ce:ri* 'coconut fibre' (< Ma.) Tu. *ce:ri* 'fibre' (< Ma.). Te. *ce:ru* 'string, cord'. (1051)

See also example 350.

22. 1.2. There are two main types of exceptions to the process of palatalization: (i) loanwords and (ii) onomatopoetic words Telugu, especially the classical dialect shows a number of forms with *k-* before a front vowel, which are therefore considered to be loans from Kannada. Examples are *kempu* 'a ruby' (also Ta. Ma; DED 1607); *kiniyu* 'to be angry', *kin(u)ka* 'anger' (example 934), *kedayu* 'to die', *keḍapu* 'to kill' (example 936); similarly palatalized forms in some of the non-palatalising languages have to be explained as loans from the neighbouring palatalizing language, e.g. Kannada (example 929), Toda (example 934), Kol-Nk. (examples 930, 935, 943), Go. -Kuwi (example 939).

Annamalai (1968) has demonstrated that onomatopoetic words in the three palatalizing languages resist the change, e.g.

(i) Ta. *kiccu* *kicc-enal* 'chirping, screaming'. Ma. *kicc<sup>u</sup>* *kiccu* 'chirp'; *kiñcu-*, *keñcu-* 'to squeak' Te. *kica* *kica* 'chirping of birds, etc'; *ki:cu* 'squeaking' (1273)

(ii) Ta. *kilkil-enal* 'clinking sound'; *kilukku*, *kilukiluppi*: 'children's rattle box' Ma. *kilukilu* 'tinkling, rattling' Te. *kila* *kila* 'sound of laughter'. (1312)

(iii) Ta. *kitukit-enal* 'creaking, noise of writing on olas'; *kiriccu* 'creaking sound' Te. *kittu*, *kirakira* 'creaking'. (1325)

- (iv) Ta. *ki:ki:-yenal* 'chirping (as of chickens). Te. *gi:gi:* 'shrilly' (1338)
- v) Ta. *kekkaṭam* 'loud laughter', *kekkali*. Te. *geggili, geggalu*, (derision\*. (1608).
- vi) Ta. *kettu kett-enal, ketan̩ ketan̩-enal* 'palpitation of the 'heart through fright'. (1625)
- (vii) Te. *ke:ka* 'a cry or shout, the cry of a peacock'; *ke:karinta* 'a cry or shout'; *ke:karamu* 'the cry of a peacock' (1658)
- (viii) Ta. *kiṭa:vu* 'to cry (as a peacock). (1323)
- (ix) Te. *kevvuna* 'resoundingly, loudly'. (1640)
- (x) Ta. *ke:ru* 'to cackle (as a hen)'. Te. *ke:ru* 'to chuckle with joy, to cluck (as a laying hen)'; *ke:ranta* 'chuckle'. (1671)
- (xi) Te. *kiṭakiṭala:du* 'to be crowded'.
- (xii) Ta. *ki:ṛu* 'to scratch, draw lines'. Ma. *ki:ṛu* 'a stripe'. Te. *gi:ṛu* 'to scratch'. (1352)

Burrow (1968:47-49) has suggested explanations for a few cases that fail to show palatalization: Ta. *ki:rai* 'greens, vegetables' but Ma. *ci:ra* (DED 1345). Burrow tried to explain this by saying that the vowel in this word at the time of palatalization was not *i*: but it was the diphthong *ui*, cf. Go. *kusi:r* 'vegetable' (DED 1467). If this were true, palatalization should not have taken place in Malayalam also. Ta. Te. *kiccili* 'orange' (DED 1270) and Ta. Ma *ki:ri* 'mongoose' (DED 1344) are later introductions into the language(s); Burrow noted that in the earliest Tamil the Sanskrit word *nakulam* is used instead of *ki:i*. Ta. *kiccu* 'fire' and Te. *kittu* (DED 1272) are loans from Ka. *kiccu*.

22. 1.3. In Kuṣux and Malto PDr. \*k- remains unchanged before a high vowel (*i.e.*, *i, i:, u* and *u:*) but changes before

other vowels to the velar voiceless fricative *x* (represented by *kh* in the records) in Kuyux and to the uvular voiceless stop *q* in Malto.<sup>4</sup>

In Brahui PDr. \**k*- is fricativized to *x-* as in Kuyux before vowels other than *i* and *i:*; it remains unchanged before the latter two vowels (the Brahui *sɔɪɪ* also is represented in the records by *kh* in as the case of Kuyux).

Although Burrow (1958:52) said that the change does not take place only before *i* and *i:* in Kuyux-Malto, recently Martin Pfeiffer (1972:149-150) has shown that the change is absent also before the other two high vowels *u* and *u:*. This important finding of Pfeiffer was approved and highlighted by Emeneau in his review of Pfeiffer's work (1974:756). Examples 955-957 show that \**k*- is fricativised in Brahui before *u* unlike in Kuyux-Malto.

The change under discussion is an important shared innovation among the three North Dravidian languages and thus constitutes vital evidence for the North Dravidian subgroup. As noted by Burrow, this change is absent in Indo-Aryan loanwords, the notable exception being Br. *xo:lum* 'wheat' (< Skt. *godhu:ma-*); this fact proves that this is a very ancient change.

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<sup>4.</sup> This phonetic value for Malt. *q* was given by Mahapatra (1979:25-26). He (*ibid.* 20) further notes that in the Kumārbhag dialect, it changes to ? (glottal stop) medially but is lost in the word-initial position. Although Pfeiffer (1972: 149) and following him, Emeneau (1974:756) have stated that the conditioning vowels in the above statement are the reconstructed (i.e. PDr.) ones, this can not be true because

Examples for PDr. \*k → NDr. \*k / — {i, i: (u, u:)}

946. Kur. *kicc-* ‘to break into very small pieces (soft thing, esp. bread, greens) with the fingers’; *kiss-* ‘to open and expand the flesh with a needle, etc, e.g. in order to extract a thorn; to goad’. Malt. *kis-* ‘to dig out a thorn from the flesh’. Br. *kishk-* ‘to pluck, break off’: Te. *giccu* ‘to scratch, pinch’. Kol. *kism-*. Go. *kisk-*. Konda Kui *kis-*. (1271)

947. Kur. *ki:ba:* ‘frost, ice’. Malt. *ki:we* ‘cold, cool’; *ki:w-ki:wr-* ‘to feel cool or cold’. (1347)

in cases where PDr. \*u, \*u: change to Kur.- Malt. o, o:, the latter languages have x, q but not k before them. (Bhat (1966:102) says that the vocalic change is conditioned by the preceding x, q but this is impossible because x, q themselves depend on the quality of the following vowel. It is better to say that \*k- conditions the change). \*u, \*u: changed to Kur. Malt. o, o: after \*k- and in such cases \*k- latter changed to Ku<sub>x</sub> x, Malt. q whereas in cases where \*u, \*u: do not undergo change, \*k- also remains unchanged. From this it is clear that the change \*u, \*u: → Kur. Malt. o, o: took place first and that the change \*k- → Kur. Br. x, Malt q is later to it. Therefore it is clear that the vowel that conditions the change is of Ku<sub>x</sub>-Malto but not of Proto-Dravidian. Examples for \*k-> Kur. x, Malt. q before o, o: that are from \*u, \*u:

- i. Kur. *xopp-* ‘to form into a pile’. Malt. *qop-* : Ta. *kuppai*, *kuppam* ‘heap’. (1440)
- ii. Kur. *xorop* ‘pus’. Malt. *gorpu* : Ta. Ma. Ka. *kuru* ‘boil’. Te. *kurupu* (1771 may be combined with 1482)
- iii. Kur. *xosga:* ‘thigh’. Malt. *qosge:* Te. *ku<sub>z</sub>uvu*. Kol. *kudug.* (1527)
- iv. Malt. *qo<sub>t</sub>ri* ‘a blind person’: Ta. *kuru<sub>tu</sub>*. (1487)
- v. Kur. *xo:r-* ‘to be prosperous’, Malt. *qo:r-:* Ta. *ku:r.* (1579)

In Ku<sub>x</sub>, x is followed by i, t:, u, u: only in morphophonemic alternations where these vowels are derived from e, e:, o, o: through assimilation to the following vowel or y, e.g.

948. Kur. *kuð-/kuṛ-* ‘to thread, string, fix on any pointed instrument (e.g. a spit), throw the woof-thread in weaving’. Malt. *kuð-* ‘to pierce as with a needle’: Ka. *kuṭṭu* ‘to prick, ache’. Te. *kuṭṭu* ‘to pick, stitch, sew’. (1392 & 1397)

948a. Kur. *kund-* ‘to germinate, bud, shoot out’; *kundr-* ‘to be born’; *kundrka*: ‘birth’; *kundrta'a:-* ‘to generate, beget, produce’. Malt. *kund-* ‘to be born, be created’ : Kui *gund-* ‘to sprout, bud; n. a sprouting, budding’. (1439).

949. Kur. Malt *ku:g-* ‘to doze, slumber (out of time)’: Te. *ku:r(u)ku* ‘to sleep, n. sleep’. (1582)

950. Kur. *kūṛux* adj. ‘Oraon’; *kūṛxas* ‘an ‘Oraon man’; fem. *kūṛuxni:* ; Ta *kuṭakam*, *kuṭaku* ‘coorg’; *kuṭakku* ‘west’; adj *kuṭa*. Ka. *koḍagu* Koḍ. *koḍavī*. Tu. *koḍagu*. (1374).

951. Kur. *kuss-* ‘to strike by thrusting the head against, to butt’: Ta. *kuṭu* ‘to pound in a mortar, husk’; *kuṭtu* ‘to pound, strike, hit’. (1536)

952. Malt. *kurk-* ‘to write’ : \**kuṛi* ‘mark sign, symbol’. (1533)

953. Kur. *kuḍḍa*: ‘umbilical cord’. Malt. *kuḍe* ‘navel’: Ta. Ma. *koṭi* ‘creeper, umbilical cord’. (1398 & 1705)

Also see examples 927, 929, 935 and 940

Examples for \**k*-> Kur. Br. *x-*, Malt. *q-* (before vowel other than *i, i:, (u, u:)*).

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<i>xerc-</i> ‘to rub :	3rd masc. sg. past	<i>xircyas</i>
<i>xe:nd-</i> ‘to buy’ :	„ „ „	<i>xindyas</i>
<i>xopp-</i> ‘to form into a heap’ ,,	„ „ „	<i>xuppyas</i>
<i>xo:r-</i> ‘to shoot out new leaves’ :	„ „ „	<i>xurya</i>

Also cf. *xissi* (<\**xessi*) ‘fair-complexioned’ and *xurti* (<*xorti*) ‘evening meal-hour’ (see Pfeiffer (1972:150)).

954. Kur. *xē:so* 'red; blood' *xē:s* 'blood; anger'. Malt. *qe:so* 'red' *qe:slo* 'reddish'; *qe:su* 'blood'; *qe:sola:r-* 'to reddens'. Br. *xi:sun* (< \**xe:sum*) 'red; gold' < \**ke(m)-* 'red'. (1607)

955. Br. *xul-* (*xuli:-*) 'to fear'; *xuli:s* 'fear'; *xulkun* 'soft, submissive': Ta. *kuluñku* 'to be shaken, agitated, tremble, shudder, quake with fear'; tr. *kulukku*. (1501)

956. Br. *xutt-* 'to dig, probe' < \**kutt-* 'to pierce'. (1429)

957. Br. *xurruka:v* 'a snore' : Ta. *kurai* 'to bark, n. noise, roar, shout'. Malt. *ku:r-ku:r* 'call to a dog'. (1496)

Also see examples 350 and 1089.

## 22. 2. \*-k-.

22. 2.1. \*-k-: -g- in most of the languages; Ta. Ma, -k- (phonetically -x-). To. -x-. Pa. -g-, -v-. -y-.<sup>5</sup> Go. Kuwi -y-. Kuř -x-. Malt. -G- (phonetically a voiced uvular fricative, in the Kumarbhag dialect *G* > *h*, so Mahapatra 1979:208) Br. -x- (uncertain; example 958 may be evidence).

958. Ta. *naku* (*nakk-*) 'to laugh'; *nakai* (-*pp-*, -*tt-*). Ma. *nake-* Ka. *nagu* (*nakk-*), *nage*. Tu. *nakeri-* 'to titter, giggle'.

<sup>5</sup> In Parji. \*-k- normally develops to -v- in the northern dialect but to -y- in the southern dialect: N. *merva*, S. *meriya* 'grand child': Kol. *marge*; N. *me:va*, S. *me:ya* 'she-goat': Te. *me:ka*; N. *ve:v-*, S. *ve:y-* '(day) to dawn': Kol. *ve:g-*. However, in a few cases *v* occurs in all dialects e.g. ev (pl. *ev ul*) 'leaf' : Kol. *e:g* (pl. *e:g-u:l*); *nav-* 'to laugh': Te. *navvu*, *nagu*; Ta. *naku*. 'In some verbal roots which originally ended in -g- preceded by another consonant, there is a variety of treatment: it may disappear altogether as usually in the north; it is occasionally preserved in the south, more usually changed to -v-, while in the extreme south it is often changed to -i-: S. *mulg-*, *muli-* 'to dive, be submerged' (3rd s. past m. *mul-gated*, *muli-ated*): Kur. *mulg-*, etc.; S. *vilg-*, *vili-* 'to be bright, white' : Ta. *vilāñku*, etc.' (so Burrow and Bhattacharya (1953:6))

Te. *nagu* 'to laugh', *nagavu* 'a laugh'; *navvu* 'to laugh, n. laughter'. Pa *nav-* 'to laugh', Ga. (Oll.) *nag-*, (S) *nagg-*. ? Br. *max-*. (2944; the Brahui word with initial *m-* may be put under 377 Ta. Ma. *makil* 'to rejoice').

959. Ma. *pokiṇa*, *pokāṇa*, *po:ṇa*, *pu:ṇa* 'green imperial pigeon'. Kur. *poxa:* Malt. *poGe.* (3647).

960. Ta. Ma. *puku* (*pukk-*) 'to enter'. Ko. *uk-/ug-* (*uky-*). To. *pux-* (*puk-*). Ka. *pugu/pogu*, *hogū* (*pokk->hokk-*). Tu. *poggua-*. (3481)

961. Ta. Ma. Ka. *mukil* 'cloud' Tu. *mugali*. Te. *mogulu*. Ga. *mogul*. Go. (M) *moyol*. (4006).

962. Ka. *ke:gu* 'to cry, as a peacock', Go. *ke:y-* 'to call, summon, (peacock) to cry, (owl) to hoot'. (1658)

963. Ka. *sugi* 'to tear off, strip off'. Kur. *cox-* (*cokkh-*) 'to pluck, cull'. Malt. *coG-* (*coq-*) (2173)

964. Ta. *tukai* 'to tread down, trample. on'. Pe. *to:g-* 'to tread, step on'. Mand. *tug-* 'to trample'. Kui *to:g-* 'to kick'. Kuwi (Su.) *toy-*. (2917)

965. Pa. *to:y* 'Ficus glomerata'. Ga. (P) *to:y*. Go. *to:ya*; Konḍa Pe. *to:ga*. Mand. *to:ge*. Kui *to:ga* 'fig'. Kuwi (S) *tō:ya*. (2915)

966. Ta. Ma. *pakal* 'day, daytime'. Ko. *po:l*. To. *poxol* (< Ta.). Ka. *pagal*, *hagalu*. Kod. *po:li*. Tu. *pageli*. Te. *pagalu*, *pavalu*. Pa. *pakṭa*. Go. *pi:al*. (A) *piyya:l*, (Mu.) *payyal*. Kur. *pahpahr-* 'to dawn'; *pairi* 'morning'. Malt. *pa:lGr-* 'to dawn'; *pohpohre* 'dawn'. (3151)

See also example 766.

According to Shankara Bhat (1970), \*-k- : Kur. -x-, Malt. -G- only after a short vowel; after a long vowel, it is retained, e.g. Kur. Malt. *e:k-* 'to walk' : Ta. *e:ku*, Te. *e:gu* (DED) 740).

22. 2.2. Intervocalic *-k-* is sometimes lost and this loss results in the lengthening of the preceding vowel; this development is found in many languages: Ta. *pakal*, *pa:l* 'dividing, portion' *pakuti*, *pa:tu*, *pa:ttu* 'share' (DED 3154 & 3371); in example 966 similar contractions are found to occur in Kota, Kodagu (note the loss of *\*-k-* in Kodagu; see p. 251) and Malt. Also cf. Ko. *u:r* and To *ü:r* 'fingernail' (<*\*ukir*, example 805). The contraction in *\*tokal*>*\*to:l* 'skin' (DED 2937) goes back to the PDr. period. Sometimes *-k-* alternates with *-v-*; example 958 is a good illustration of this. In Old Telugu *pagalu* 'daytime' has the alternant *pavalu*; similarly *uḍigimpumu* / *uḍivī-impumu* 'stop(it)', *ciguru*, */civuru* 'sprouts'. In the Telugu human numerals, Old Telugu shows *v* in agreement with Tamil and other languages but modern Telugu replaces it with *g* as in Old. *mu:vuru* (Ta. *mu:var*): Mod. *mugguru* 'three persons'; Old *nalu:vuru* (Ta. *na:lvar*): Mod *naluguru* 'four persons'; Old *nu:rvuru* (Ta. *nu:ṛuvavar*): Mod. *nu:ruguru* 'hundred persons'. Here *-g-* replace the original *-v-*; this may be analogical to *-g->-v-* found elsewhere. In colloquial Tamil some low class dialects replace *-x-* by *-v-* in some words as in Std *maxē* versus *ṁ*(low-class) *mavē* 'son'.

22. 2.3. In Tamil-Malayalam, intervocalic *\*-k-* also is palatalized to *-c-* in a number of cases, although this is not a very regular process (Burrow 1968: 49–52). Examples are Ta. *arici* (<*\*ariki*), *ari* 'rice' (cf. Ka. Tu. *akki* (<*\*ar(i)ki*; DED 178); Ta. Ma. *iñci* 'ginger' <*\*singi*, cf. Pali *singi*<Skt, *śringavera*; Ta. *ña:ñcil*, *na:ñcil* 'plough', Ma. *ne:ññil* (<*\*ña:ñkil*, cf. Ka. *ne:gil*; example 1093); Ta. *neruñcil*, *neruñci* '*Tribulus terrestris*', Ma. *ñeruññil* (<*\*ñerunkil*; cf. Ka. *nerigilu*, DED 2388); Ta. Ma. *eccil* 'food left over' (<*\*eñkkil*; cf. Te. *eñgili*, DED 666).

On the other hand, this change is absent in the majority of words, for example, *ukir* 'fingernail', *tukil* 'cloth', *tikiri*,

'wheel', *tukir* 'coral', *pakir* 'to distribute, divide', *makil* 'to rejoice', and *mu:nkil* 'a bamboo'. We have, therefore, to conclude that this change is only partial and has not effected the whole lexicon.<sup>6</sup>

### 22. 3. \*-kk-.

22. 3.1. \*-kk-: Ta. Ma. -kk-. Ka. Kod. Tu. Te.  $\overset{\circ}{V}$ -kk-,  $V:$ - k-. Ko. To. Kol. Nk. Pa. Ga. Go. Konda Pe. Mand, Kui Kuwi -k-. Kur.  $V:$ ] -x-,  $\overset{\circ}{V}$ ] -kk-, -kh-, Malt. -q-, -k-.<sup>7</sup> Br. -kk- (also -xx-).

Examples:

967. Ta. *ka:kkai*, *ka:kka:y* 'crow'. Ma. *ka:kka*, *ka:kkacci*, *ka:kan*. Ko. *ka:k*, *ka:yk*. To. *ka:k*. Ka. *ka:ke*, *ka:ki*, *ka:ge*, *ka:gi*. Kod *ka:ke*. Tu. *kakke*, *ka:ka*. Te. *ka:ki*. Kol. *ka:ka*? < Mar. *ka:k*). Pa. Ga. (Oll.) *ka:kal*. Go. (A) *ka:ka:γ*. Konda *ka:ki*. Kui *ka:ka* Kuwi (P) *ka:vā*. Kur. *xa:xa*: Malt. *qa:qe* Br. *xa:xo*: (1197)

968. Ta. Ma. *nakku* 'to lick'. Ko. *nak-*. To. *nok-*. Ka. *nakku*. Kod. *nakk-*. Tu. *nakkī-* (all < \**nakk-*). Te. *na:ku*. Kol. Nk. Ga. Go. Konda Pe. *na:k-*. Pa. Mand. *ne:k-*. Kui Kuwi *na:k-* (all < \**na:kk-*). (2945)

<sup>6</sup>. Burrow (1968:50-51) tried to explain this irregularity by assuming that in case where there is no palatalization the original vowel was an "unaccented neutral vowel (ə)" or the vocalic l or r (the latter two are for the sequences V l and V r.). This view is unacceptable because there is no other evidence to necessitate the reconstruction of these additional sounds for Proto-Dravidian (see also Krishnamurti (1961:140)).

<sup>7</sup>. Shankara Bhat (1970) noted that in Kuγux \*-kk->-x- after a long vowel but -kk- or -kh- otherwise; the conditioning for the latter two is not known. In Malto -q- is the most common correspondence but it shows -k- in cases where Kuγux shows -kk-; see examples 971-973.

969. Ta. *vikku* ‘to hiccup’. Ma. *vikku* ‘to stammer’. To. *pik-* ‘to catch’. Ka. *bikku* ‘to pant, sob, hiccup, stammer’. Tu. *bikki-* ‘to hold one’s breath’. Te. *vekku* ‘to hiccough, sob’. Kui *vek-* ‘to cough’. Kur. *bekkh-* ‘to be choked, cough’. Malt. *beq-* ‘to be chocked’. (4412)

970. Kur. *cakkh-* ‘to pierce’. Malt. *caq-*. Br. *jaxx-*. (1879)

971. Kur. *kukk* ‘head, extremity’. Malt. *kuku*. (1358)

972. Kur. *ekka*: ‘tortoise’. Malt. *eke*. (660)

973. Kur. *okk-* ‘to sit’. Malt. *ok-*; tr. *oktr-*. (786)

**22. 4. \*-ṅk-.**

22. 4. 1. \*-ṅk-: Ta. -ṅk-. Ma. -ṅṅ-, -ṅk-. Ko. -g-, (-ṅg-).

To. -g-, -x-. Ka. -g-, <sup>V<sub>1</sub></sup>[ -ṅg-, Kol. Nk. Nk (Ch) Pa. Ga. -ṅg-, Go. -ṅg-. Konda -ṅ-, Pe. -ṅ(g)-. Mand -ṅg-. Kui Kuwi -ṅg-. Kur -x-, -ṅx-, -ṅg. Malt -G-, -nq-, -ṅG-.<sup>8</sup> Br. -ṅg-, -G- (-ṅg- and possibly Malt. -ṅG- represent -ṅg-)

<sup>9</sup>. According to Shankara Bhat (1970) the Kurux-Malto correspondence of \*-ṅk- in various positions are as follows:

- i. after the first long vowel: Kur x; Malt G
- ii. after the first short vowel: Kur. ḡ; Malt. ḡG
- iii. after the second (reconstructed) vowel: Kur. g; Malt. g

The correspondence Kur. *ṅx*, Malt *-nq*. in DED 3963 (Kur. *mi:ṅx-* (Bhat *minkh-*) ‘to close the eyes’, Malt. *ming-* is irregular in his opinion. Unfortunately, we cannot be sure that the correspondence Kur. -g- : Malt. -g- represents \*-ṅk- since none of the entries in which this is found contain cognates with known reflexes of \*-ṅk- from any other language; examples:

- i. Kur. Malt. *arg-* ‘to climb’ (195, no cognates from other languages).

974. Ta. *tu:ñku* 'to hang, swing, sleep, etc'. Ma. *tu:ñnu-*. Ko. *tu:g-* 'to hang'. To. *tu:x-*. Ka. *tu:gu* 'to swing, sleep, hang, etc. Ko~~d~~ *tu:ñg-* 'to hang' Tu. *tu:ngi-* 'to swing, doze'. Te. *tū:gu* 'to hang, swing, sleep'. Konda, *du:ñ-* 'to hang', Pe. *tu:ñ(g)-*. Mand. *tru:ñg-* 'to swing'. Kui (K) *du:ñg-* 'to hang', (Winfield) *dru:ng-* 'to swing'. Kuwi *tung-* 'to swing, hang'. Kur. *tungul* 'a dream'. Malt. *tumgle*. Br. *tunga:n* 'asleep'. *tuG* 'sleep, dream'. (2777a)

975. Ta. *poñku* 'to boil over, bubble, swell' Ma. *poñnu-* Ko. *pog-* 'to boil over'; *pong-* 'to increase (intr. magically in number)' '(l.w.)'. To. *pīg-*. Ka. *pongu*. Ko~~d~~. *poññ-* 'to swell'. Tu. *bongu-* 'to be distended. Te. *pongu* 'to bubble up, boil, be elated'. Kol. *pong-* 'to boil over'. Nk. *pong-* 'to expand'. Go. *po:ng-;* (A) *poñ-* 'to flow, overflow'. Kon~~da~~ *poni-* 'to be bloated', Pe. *boñ-* 'to be spilled'. Kui *pong-* 'to be spilt, scattered'. Kuwi *pong-* 'to swell'. Malt. *ponGj-* 'to be increased' *poGol-* 'to swell'. (3658)

976. Ta. *ve:ñkai* 'tiger'. Ma. *ve:ñña*. Te. *vē:gi*. (4542)

977. Kur. *na:x-* 'to breath, rest, recover oneself'. Malt. *ne:gy-* 'to breathe'; *ne:Ge* 'breath': Ta. *e:ñkal* 'asthma in children'. Ma. *e:ñnu-* 'to breathe with difficulty'. (3120)

978. Kur. *añgl-* 'to open (mouth) wide', Malt. *añGl-* 'to gape': Ta. *anka:* 'to open the mouth'. Tu. *angī-* Pa. *añalp-* (*añalt-*). Kui. *angali a:/gi-* Kol. *añgasi* 'a yawn'. Nk. *aṅga:śi* (36)

ii. Kur. *marag* 'horn, antler'. Malt. *margu*. Br. *marG* 'horn': Ta. *maruppu*. (3864)

iii. Kur. *osga:* 'rat'. Malt. *osge* 'mouse'. (794, no cognates from other languages).

See also DED 673, 3034, and 3169.

## 22. 5. The Malayalam reflexes of NP.

22. 5.1. It is well known that assimilation of the plosive to the preceding nasal in NP clusters is an important characteristic of Malaya:lam. But there are some lexical items that fail to show this change. This problem has been treated in detail in two recent papers, one by V.I. Subramoniam (1972) and the other by N. Kumaraswami Raja (1980b). This change seems to be an example of "incomplete change" or "change that is still in progress" in the sense that it has not yet covered the entire lexicon; this hypothesis is made further plausible by the presence of free variants in some cases. The conclusions of the two papers mentioned above can be summarised as follows.

1. Loans from Indo-Aryan are not normally affected by this change (at least in the modern language; the inscriptional language has cases like *caññaran* < Skt. śāṅkara-, *painnumi* < *pakuni* < Skt. phalguni:- 'name of a month').
2. The retroflex and the labial sequences, i.e. \*ṇṭ and \*mp respectively, are not affected by this change (see 24.3. and 27.4.).
3. The alveolar sequence \*ṇṭ always changes to dental nn without exception (see 25. 3.2. for details).
4. The velar (\*ṅk), the palatal (\*ṅc) and the dental (\*ṅt) sequences show change in some cases but fail to do so in some others.<sup>9</sup> Although some general statements regarding the environments in which the change is common or otherwise can be made, they all have exceptions.

<sup>9.</sup> In the table of correspondances in *DED* (pp. xii-xiii), only the reflexes with assimilation are given for \*ṅk, \*ṅc and \*ṅt. However, in Emeneau (1970a), both the reflexes were given only for the palatal \*ṅc.

Inscriptional evidence shows that the assimilation had started to, operate by the 10th century A.D.; however, the assimilation in the alveolar sequence is attested in the inscriptions of the 11th and the 12th centuries only in two instances; therefore A.C. Sekhar (1953:27), in agreement with L.V. Ramaswami Aiyar (1937-39, vol. 6:8-9), concludes that the change spread to this sequence some time after it affected the velar, the palatal and the dental sequences.

5. In the case of \**nt* (see 26.4.2.), absence of change is more common when it is not a past tense marker. The past tense marker regularly gets assimilated except in the case of the two verbs *no*: (*no-nt-*) 'to pain' and *ve*: (*ve-nt-*) 'to be boiled'. The non-morphemic \**nt* does not undergo the change after the first vowel of a word, i.e. after (C)V̄- or (C)V- but after the second vowel of a word, i.e. after (C)VCV-, it gets assimilated in 50% of the cases.

6. In the case of the velar and the palatal sequences (for examples for the latter, see 23.4.), assimilation is less common after (C)V-, but it is more common after (C)V̄- or (C)VCV-. The following table shows the percentages of cases of the two sequences affected by change in each of the three positions.

	(C)V-	(C)V̄	(C)VCV-
* <i>nk</i>	64%	80%	80%
* <i>nc</i>	19%	67%	78%

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Zvelebil (1970:168-176) has noted that the assimilation in the NP clusters (in Malayalam) is "not regularly and equally distributed" (p.176). He has also observed that assimilation is the rule in the inflectional suffixes. He has given both types of reflexes for the above mentioned three sequences and even for \**nt* (this may be an oversight in the case of \**nt* because in his discussion on p. 176 he has noted that the clusters *nt* and *mp* "were almost unaffected").

In all the three positions, the percentage is higher in the case of the velar sequence than in that of the palatal. On the whole, 75% of the cases of the velar sequence and 50% of the cases of the palatal sequence get assimilated. As in the case of the dental sequence, assimilation in the palatal sequence is without exception when the later is the result of palatalization of the dental \**nt* past suffix (see 26.5.1.).

It is to be noted that assimilation does not take place if there is a word boundary between the nasal and the following stop: cf. *valen-kai* 'right hand' (4317), *mulan-ka:l* 'knee', *mulan- kai* 'elbow' (4093), *kanañ-kai* 'wrist' (974), 'forearm' (979), *kanañ-ka:l* 'ankle' (974), 'shinbone, calf of leg' (979).

### Some additional examples:

<i>konka</i> 'woman's breast' (1693)	<i>taññu</i> (< * <i>tañku</i> ) 'to stop' (2443)
<i>tañkam</i> 'pure gold' (2442)	<i>nañña</i> (< * <i>nañkay</i> ) 'clever woman' (2445)
<i>tiñkal</i> 'moon' (2626)	<i>tiññal</i> (< * <i>tiñkal</i> ) month (2626)
<i>pañku</i> 'part' (3154)	<i>ta:ññu</i> (< * <i>ta:ñku</i> ) support* (2573)
	<i>ta:ññal</i> , <i>taññal</i> 'they, the selves' (2573) <sup>10</sup>
	<i>noññu</i> (< * <i>noñku</i> ) 'unripe pulp of a palmyra fruit' (3065)

<sup>10</sup>. V. I. Subramoniam (1972:139) prefers to segment *taññal* 'niññal' and *ñaññal* as *tañ-/niñ-/ñañ-* plus *-al* instead of the normal segmentation with *-ka:l* (*tañ-ka:l* > *tañ-ñal*, etc.). His proposed analysis goes against the comparative evidence. Even at the descriptive level, it is unacceptable because no motivation

<i>mañka(cci)</i> 'a young playful woman' (3776)	<i>moñña</i> (< * <i>moñkay</i> ) 'monkey' (3777)
<i>mañci</i> 'a large sort of boat' (3787)	<i>maññał</i> (< * <i>mañcal</i> ) 'tumeric' (3786)
<i>u;ñcal</i> 'a swing' (629)	<i>maññu</i> (< * <i>mañcu</i> ) 'dew' (3792)
<i>añcu</i> (< * <i>ayntu</i> ) 'five' (2318)	<i>kaññi</i> (< * <i>kañci</i> ) rice, gruel' (927)

7. To conclude, of the four sequences that are affected by assimilation (i.e. all except the retroflex and the labial), the alveolar sequence gets assimilated in all cases and the velar sequence ranks next with 75% of cases of assimilation; the palatal and the dental sequences are the least affected by this process. In the latter two sequences, however, assimilation takes place almost without exception when they are morphemic units.

## 22. 6. Kota reflexes of \**nk*.

22.6.1. Both the Kota reflexes -g, and -ng- of \*-nk- occur in one and the same environment as the following examples show (also see examples 258, 974 and 975).

979. Ko. *aṅga:dy* 'shop, bazaar', To. *ogod̪y* 'bazaar' (< ?Badaga): Ta. *aṅka:t̪i*. Ka. *aṅgađi*. (37)

980. Ko. *ceriŋgl* 'corner of a cloak or piece of cloth'. To. *tergy*: Ka. *seṛa(n)gu*, Te. *ceṛāgu*. (2298)

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can be ascribed to the presence of a stem alternant ending in a velar nasal before -ał for these pronouns. The rule that is given by him to account for the doubling of the consonant after (C)V- is not accurate because the actual rule has several constraints on it. For example, it will not operate in derivation (historical and descriptive), cf. \**tal-ay* (not \**tall-ay*) 'head', \**kot-ay* 'umbrella', \**kol-ay* 'murder', etc. Therefore, this approach, which was intended by him to make the rule of retention of the plosive of NP after (C)V exceptionless is unmotivated and incapable of serving the purpose.

981. Ko. *e:ṅg-* (*e:ṅgy-*) 'to grieve' : Ta. *e:ṅku* 'to pine, long for'. (745)

982. Ko. *kaṅga:c* 'wonderful sight such as never seen before' (l.w. from colloquial Ta. *kaṅka:cci* < lit. Ta. *kañ-ka:ṭci*; 1209).

983. Ko. *mag-* (*magy-*), *maṅg-* (*maṅgy-*) '(light) becomes less' Ta. *maṅku*. (3890; of the two forms, *maṅg-* must be a loan).

984. Ko. *tigł* 'moon'; *tiṅgl* 'month'. : To. *tigili* 'moon'; *ti:L* 'month' : Ta. *tiṅkał* 'moon, month' (2626; Ko. *tingł* and To. *tigili* are loans).

985. Ko. *tong-* 'to hang (intr.)' : Ta. *toṅku*. Ka. *toṅgu*. (2863)

986. Ko. *ta:ṅg-* 'to support (burden)' : Ta. *ta:ṅku*. (2573)

987. Ko. *korg* 'black monkey' : Ta. *kuraṅku*. (1473)

988. Ko. *kalg-* 'to be mixed' : Ta. *kalaṅku*. (1096)

989. Ko. *polg-* 'to be on intimate term with' : Ta. *pulaṅku* 'to practise, associate with'. (3297)

990. Ko. *va:g-* 'to make (pot) bulge (in throwing it on the wheel)' : Ta. *va:ṅku* 'to bend'. (4371)

Note the doublets in examples 983, 984 and also in 975. Immediately after a word initial vowel, *-ṅg-* is more common than *-g-* while after the reconstructed second vowel *-g-* is more common than *-ṅg-*. Immediately after V<sub>1</sub>, no language other than Kota-Toda shows loss of nasal in \*NP clusters. Therefore the Kota words that show such a development can not be loans. The only alternative left is to consider *-g-* as the native Kota development of \*ṅk- in all environments; then words with *-ṅg-* will have to be considered as loans. This conclusion is supported by such obvious loans as *aṅga:dy* and *kaṅga:c* and the doublets.

## 22. 7. Toda reflexes of \*ñk

22. 7.1. In Toda, -g- is the regular reflex immediately after the first short vowel; note the following in addition to example 975 (-x- does not occur in this environment).

991. To. *tō(g) go:y* 'coco-nnt'; *tōg nō:n* 'coir rope': Ta. *tenku*. (2806)

992 (= 258) To *nug-* 'to gulp down': Ta. *nuñku*. Ko. *nūng-* (:064)

993. To. *kwig-* 'the plains south and east of the Nilgiris': Ta. *kongu*. (1692).

22. 7.2. After an initial long vowel and after the reconstructed second vowel, both -x- and -g- occur without there being any possibility for phonological conditioning. The only possibility is to consider the peculiar development -x- as the normal Toda reflex and to consider words with -g- in these positions as loans. In some such words with -g- there are other indications to show that they are loans (note that in example 984, *L* instead of *L* indicates that *tigüL* is a loan; *ti:L* with the peculiar Toda contraction and *L* is a native word) Such loans seem to be from Kannada through Badaga.

994. To. *ō:x-* 'to scream (peacock or diviner)': Ta. *e:ñku*. (746)

995. To. *to:g-* 'to support (burden); be stuck in branch': Ta. *tañku*. Ka. *tañgu*. (2573)

996. To *pa:g-* 'to fall, (disease) subsides': Ta. *va:ñku* 'to bend'. Ka. *ba:gu* (4371, the absence of the change \*a: > To. o: also indicates that the Toda word is a loan).

997. To. *wax-* 'to sleep': Ta. *uñañku*. (606)

998. To. *max* 'slope, hill side': Ta. *maruñku*. (3861; To. *magüL* 'slope of hill' < Ka. *maggal*, *maggil*, *maggul* 'side')

999. To. *kwarg* ‘monkey’ : Ta. *kurañku* Ka. *korañgi* (1473)

1000. To. *pōLx-* ‘to dawn’ : Ta. *viñañku* ‘to shine’. (4524)

1001. To. *twülg öd-* ‘(ball) bounces, (river) goes over rocks’: Ta. *tuñañku* ‘to move, shake’. Ka. *tułaku*, *tułuku*. (2762; ! instead of *L* indicates that the Toda word is a loan).

1002. To. *wiñx-* ‘to wither, dry (intr.)’; *wiñg-* ‘to become scorched (by sun)’ : Ta. *uñañku* ‘to dry, shrink’. Ka. *oñagu*. (517; *wiñg-* must be a loan)

1003. To. *wiθx-* ‘(horns of fighting buffaloes) slip apart’ Ta. *otuñku* ‘to step aside, retreat’. (821b)

1004 To. *wiḍg-* ‘to be crushed’ : Ta. *otuñku* ‘to be restrained’. Ka. *uḍugu*, *uḍagu*. (804)

The above paired instances are enough to prove that the Toda words with *-g-* after a long vowel or after reconstructed second vowel are loans.

## 22. 8. The Kannada reflexes of \*NP.

22.8.1. A generalized statement for the development of \*NP (i.e. a nasal + hormoganic plosive) in Kannada can be given: The nasal in \*NP will be retained by Kannada only when it is immediately preceded by a word initial short vowel, i.e.

(C)  $\overset{\circ}{V}_1-$ ; therefore in this environment, \*NP → NB. In all other cases including after a word initial long vowel, it will be lost and \*NP yields B. The rule, therefore, is as follows.

$$\begin{aligned} *NP &\longrightarrow NB / (C) \overset{\circ}{V}_1- \\ &\longrightarrow B \text{ elsewhere} \end{aligned}$$

This development was first noted by Shankara Bhat (1964:63) and later Emeneau (1967a:382–383) made use of it to explain the development of the past suffix \*-nt-. Earlier, Narasimhia (1941: 94–95; 142–143) noted that the homorganic nasal that was present in Old Kannada was lost optionally in medieval

Kannada but regularly in Modern Kannada (in positions other than immediately after (C)V<sub>1</sub>-). According to Narasimhia, the loss of the homorganic nasal started around the 11th century A.D. Shankara Bhat (1964:68-69) points out that the Havyaka dialect is not affected by this change. Examples for Old Ka. NP/NB : Mod. Ka. P/B.

Old Ka.	Med. Ka.	Mod. Ka.
añangu	añangu/añegu	añagu
eranke	eranke/erake	erake/erekke
serangu		seragu
kusumbe	kusumbe/kusube	kusube
tu:ñku		tu:gu
da:ñtu		da:tu
ke:ñte		be:te
kodanti		kodati
toðañku		toðaku

Examples from the Havyaka dialect for the retention of homorganic nasal.

Standard Ka.	Havyaka	
o:ti	o:nti	'lizard' (887)
ta:gu	ta:ñgu	'to support' (2570)
da:tu	da:ñtu	'to cross' (2578)
nu:ku	nu:ñku	'to push' (3083)
alubu	alumbu	'to rinse' (208)
kalaku	kalaku	'turbid' (1096)
suruñu	suruñu	'to shrivel' (2213)
avuku	avunku	'to press' (143)

In cases where the derivative vowel was lost (after r or l) the homorganic nasal after it was lost even in the Old Kannada period, e.g. *mardu*, *maddu* 'medicine' (Ta. *maruntu*, example 1084); *bild-*, *bird-*, *bidd-* (past stem of *bi:l* 'to fall' < \**vilu-nt-* (cf. Ta. *vilu* (-nt-) 'to fall', 4457), see also example 998).

## 23. 1. \*c-.

23. 1.1. PDr. \*c- in the word initial position has undergone a number of changes in the daughter languages as can be seen from the table on p. 325. Burrow's article, "The loss of initial *c/s* in South Dravidian" (1968:150-177) is a classic treatment of PDr. \*c-. First of all, there is no need to set up \*c and \*s as two different phonemes for Proto-Dravidian because a study of the cognates will show that some languages regularly have *c-* while others regularly have *s-* in one and the same etymon; in Kannada and to a less extent in Telugu there is fluctuation between *c-* and *s-* but this is due to dialectal (regional, social as well as old *versus* modern) variation. In Kota, *c* freely varies with *s* in all positions and *j* freely varies with *z* in consonant clusters (so Emeneau 1967b:64). In the case of modern Telugu, the Brahmin dialect (i.e. standard) shows *c-* while the substandard dialects show *s-*, e.g. (standard) *cu:du*, (substandard) *su:du* 'see'; in Old Telugu, *c-* optionally alternates with *s-* in sentence medial position if it is not preceded by a word ending in *n e g* *vã:du cane/ sane* 'he went'. Words with *s-* in Old Telugu are very rare. On the other hand, *s-* is more common in Kannada than *c-*

but in some words both occur e.g. *cali/ saļi* 'cold', *ca:ru/ sa:ru* 'juice, broth', *cavuļu/savuļu* 'brackishness'.

In the South Dravidian languages and in Telugu (and also in the Koya dialect of Gondi), PDr. \*c- is lost in a number of words. This, however, is not a regular change in South Dravidian and Telugu as in these we have a number of words in which \*c- is preserved. This makes it difficult to give any conditioning for the preservation or loss in these languages and, as Burrow (1968:175) says, this is "a partial or incomplete sound change". See examples 209, 1011, 1017, 1018, etc. for the retention of \*c-. In Koya, however, \*c → φ is a regular change. In a few cases, there are doublets in the South Dravidian languages and in Telugu, one form retaining the \*c- but the other showing its loss; e.g. Ta. Ma. *cippi,ippi* 'oyster shell' (2089); Ka. *si:r, i:r* 'nit' (2158) *canda, anda* 'beauty' (1921); *cigur, cigaru, igaru* 'sprout' (2054); Tu. *cigiri, iguru*, 'sprout, bud' (2054); Te. *candamu, andamu* 'beauty' (1921), *ciguru, iguru* 'bud, sprout' (2054).

Ramaswami Aiyar (1930:171; 1932a:29) noted the correspondence Kui s-: SDr. and Te. φ- but thought that the s- in such Kui words is later and is from an orginal "prothetic glide" which he wrote y. This explanation is unacceptable because there are many words in Kui and other non-South Dravidian languages which begin with a vowel; if his theory was correct, the prothetic glide should have developed in all words that began with a vowel and thus Kui and the other languages could not have had words beginning with a vowel. E.H. Tuttle (1930:10) thought that the original sound lost in South Dravidian and Telugu is \*s, which is different from \*c but the evidence is not in favour of setting up \*s- as different from \*c- (see above).

A number of Indo-Aryan loan words in South Dravidian also show the change of \*c, \*ś, \*s→ φ; as pointed out by Burrow, this confirms beyond doubt that it has operated also in the native vocabulary of South Dravidian.<sup>1</sup> The central

<sup>1</sup> Examples:

- (i) Ta. *a:vam* 'bow-string'; Ta. Ma. *a:va-na:li* 'quiver' < Skt. *ca:pa-* 'bow', Pkt. *ca:va-*
- (ii) Ta. *e:mam, ce:mam* 'defence, protection; safety' < Pkt. *chema-* < Skt. *kṣema-*.
- (iii) Ta. *aran(am)* 'defence, fortress'. Ma. *aran* 'strong hold' < Skt. *śaranya-* 'shelter'.
- (iv) Ta. *a:lai, ca:lai* 'apartment, hall; stable or stall'. Ma. *a:la* 'workshop'. Ko. *a:l* 'cowshed'. To. *a:s* 'Toda house' < Pkt. *sa:la:-* < Skt. *śa:la:-*. (*DBIA* 165).
- (v) Ta. Ma. Ka. *a:vani* 'the 5th month, August-September' < Skt. *śra:vāṇa*. (*DBIA* 39)
- (vi) Ta. *avai, cavai, capai* 'assembly' < Skt. *sabha:*
- (vii) Ta. *e:ni, ce:ni* 'ladder' Ma. *e:ni*, Ko. *e:n̄i*. To *e:ny*. Ka. *e:ni*, Kod. *e:ni* Tu. *e:ni, enci* < Pkt. *seni:-* < Skt. *sreni-* 'line, row' (*DBIA* 55; cf. Te. *niccena* < Skt. *ni(h)sreni-, nihsrenika:-* 'ladder')
- (viii) Ta. *u:ci* 'needle'. Ma. *su:ci, tu:ši*. Ko. *tu:c* < Skt. *su:ci(:)-* (*DBIA* 171)
- (ix) Ta. Ma. *a:yiram* '1000' Ko. *ca:vrm* To. *so:fer* (< Ka.) Ka. *sa:vira* Kod. *a:irē*, (Mercara) *a:ira* < Skt. *sahasra-* (*DED* 309).
- (x) Ta. *aiyavi* 'mustard'. Te *a:va* < Skt. *sarṣapa* (ultimately < Austro-Asiatic).

The alternative forms with initial *c-* in Tamil are reintroductions from Sanskrit in later stages; in Old Tamil the forms with the loss of *c-* are more common.

languages other than Telugu and the three northern languages regularly preserve \*c- (phonemically) unlike South-Dravidian and Telugu.

Burrow (1968:176) has pointed out that the change  $e^*c \rightarrow \phi$  is earlier to the palatalization of \*k- in Tamil-Malayalam and Telugu since the c- which is from \*k- is never lost in these languages. Moreover, since the former change covers a wider area, i.e. the whole of South Dravidian than the latter one, it is obvious that it must have operated in the Proto-South Dravidian period itself while the palatalization of \*k- took place later in two individual languages at two different periods (see 22. 1.1.). Burrow is of the opinion that the change  $*c \rightarrow \phi$  must have operated in the period between the 3rd century B.C. and the time of the beginning of the Tamil record because the Tamil word (occurring in Sangam literature) *atiyama:n* (*ma:n* < \**makan* 'son') 'name of a king' also *atiyar ko:ma:n* 'king of the *atiyar*' appears in Asokan inscriptions as *satiya puto* 'name of a king in South India' with an initial s-; this indicates that the initial c/s was not yet lost in the 3rd century B.C.

Since Telugu is not an offshoot of Proto-South Dravidian, we must account for the similarity between Telugu and South Dravidian in this respect as due to areal convergence. Telugu must have undergone this change due to the influence of the neighbouring southern languages; there are two other Telugu developments that require the same explanation of areal spread from South Dravidian, namely, \*i/e and \*u/o alternation and the palatalization of \*k-.

23. 1.2. In Toda, PDr.  $*c- \rightarrow t-$  is a regular development; all Toda words with s- are loans from the neighbouring languages, Ba<sup>g</sup>aga or Tamil (Emeneau 1953). That a few

Indo-Aryan loans are also affected by the change of a palatal or *s-* to To. *t-* shows that this is a very early development in Toda; examples are *totm* 'strength' (< Skt. *saitva*), *todoṇm* 'sandal paste' (< Skt. *candana-*), *tagaṣ* 'chain' (< Skt. *synkhalā-* DBIA 131). Examples of Toda loans from the sister languages with *s-* are: *su:ṭ* 'cigar' (< Ta. *curuṭṭu*, 2211), *so:py* 'sleeping mat' (< Ka. *sa:pe*, 2024), *swi:lm* 'maize' (< Ta. *coḷam*, 2359), *sed* 'ball' (< Ka. *cenḍu*, *senḍu*, 2275), *soy-* '(other than Todas) die', *so:f* 'Baḍaga funeral' (< Ka. *saty*, 2002).

The development PDr. \**c-* > *t-* is also sporadically found in many southern (other than Toda) and central languages; it occurs only rarely in these languages and, in each case, it appears only in one or at the most two languages; see examples 1005 (Te. Go.), 1016 (Ko.), 1018 (Ko. Te. Kui), 1019 (Ko. Ka. Te.), 1026 (Ko. Ka. Te) and 577 (Ko.)

In some non-Brahmin dialects of Tuḍu, \**c-* changes to *t-* while in others \**t-* changes to *c*, *s*, *h* or *ɸ*. In the opinion of Shankara Bhat (1966a:18–19), PDr. \**c-* and \**t-* first merged into \**t-* in Proto-Non-Brahmin Tuḍu and this \**t-* (which is from PDr. \**c-* as well as from \**t-*) later changed into *c*, *s*, *h* and *ɸ* in different dialects the exact demarkation of which is not known at present (Ramaswami Aiyar 1931–32a also observed the change of \**c* → Tu. *t*; see also Ramachandra Rao 1966). He observes: "in coastal area, *t* dialects are found to the north, and *s* dialects to the south; *h* and zero dialects are found in the remaining regions, with a possible prominence of *h* in the north; *c* dialects are found among the Harijan communities of the Southern coastal region". Out of the many examples given by him, the following may be noted:

(The words in A show PDr. \**c-* and those in B show PDr. \**t-*).

A	Sapaliga	Jain <sup>1</sup>	Jain <sup>2</sup>	Holeyā	Setti	
'to die'	tay	hay	say	cay	say	(2002)
'cucumber'	tavte	havte	avte	cavte	savte	(1984)
'bottle gourd'	ture	sure	sure	cure	sure	(2216)
'to see'	tu:	hu:	u:	cu:	su:	(2257)
'to wear'	tuttu	huttu	uttu	cuttu	suttu	(2238)
<b>B</b>						
'head, hair'	tare	tare	are	care	sare	(2529)
'bran'	tavdu	havdu	avdu	cavdu	savdu	(2537)
'to sink'	ta:ri	ha:ri	ta:ri	ca:ri	sa:ri	(2597)
'coco-nut tree'	ta:re	ta:re	a:re	ca:re	sa:re	(2601)
'to eat'	tini	tini	ini	cini	sinī	(2670)
'honey'	tiga	tiga	ci:ya	ci:yo	ci:yo	(2674)
'river'	tude	hude	sude	cude	sude	(2773)

As suggested by Burrow (1968:168) it is plausible to think of PDr. \*c- in a few cases that have alternant forms with t- and without it as in Ta. *alal* 'to burn, glow, n. fire' (234) and Ta. *talal* (2542) with the same meanings; the PDr. form could be \*calal.

23. 1.3. Gondi shows up a three-way dialectal division in the matter of representing PDr. \*c- as s-, h- and φ-. It is represented by s- in the northern and western dialects. "Further to the south and east, in Chanda, northern Bastar and Kanker it has been changed to h-, while in the Hill-Maria dialect and in Koya (Malkangiri, South Bastar, and south of the Godavari) this h- has been completely elided" (so Burrow and Bhattacharya 1960:77). In addition to the southern and the eastern dialects of Gondi, Pengo (see footnote 4) Manda and Kuvi also show h- < \*c- (the Kutia dialect

of Kui also shows the same development; see Burrow and Bhattacharya 1961:120)

23. 1.4. PDr. \*c > NDr. k / — {\*u, \*u:, \*e, \*e:}.

In a few etymological groups, the north Dravidian languages show *k*- corresponding to *c*- of the other languages (see examples 1016, 1017, 1018 for \*u, \*u: and 1007, 1011, 1021, 1022 for e\*, \*e:) <sup>2</sup>

Emeneau (1961b) examined these cases and suggested that in these PDr. \*c- changed to NDr. \*k- before \*u, \*u:, \*e or \*e:. Before Emeneau wrote this paper, other scholars suggested that the North Dravidian *k*- in these is original and that it palatalized to *c*- in the rest of the languages. This explanation is not satisfactory because palatalization before a back vowel is impossible and there are clear contrastive instances of PDr. \*k- changing to Kur. Br. *x*- and Malt. *q*- before \*e, \*e:. In a recent article, Emeneau (1974: 756-757) reasserted that \*c- having been backed to *k*- before a back vowel is phonologically possible. But he expressed doubts about the validity of the second part of the conditioning, i.e. \*e, \*e: especially because a new etymology suggested by Pfeiffer has PDr. \*c-> Kur. Malt. *c*- before \*e, i.e. Kur. *ce:xel* 'greens', Malto. *ceGlu* 'small branches': Ta. *celi* 'to grow well (as vegetation)' (DED 2293). Even in the earlier paper, he put forth the second conditioning tentatively and with reservations because of many other disturbing phonological problems involved. He (1974:756) disapproves of Pfeiffer's solution of setting up \*k- and \*c- alternation in Proto-Dravidian in these cases saying that it "merely pushes the problem back into pre-Dravidian".

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<sup>2</sup>. There is one more case of \*c->NDr. \*k- before \*u, i.e. Br. *kurr-* 'to shrink from, contract, keep back' : Ta. *curunku* 'to shrink, etc.' (2213)

It is necessary to say that the \**u*, \**u*: that condition this change are of Proto-Dravidian (but not of the present-day languages) because there are two cases in which the Northern languages have *c-* before *u*, which is derived from \**o* or \**o*: (i) Br. *cuṭṭi-* 'to drip' (:Ta. *coṭṭu*, 2324) and (ii) Kur. *curx-* 'to pour'. Malt. *curG-* 'to ooze out', Br. *curr-* 'to flow, gush, (:Ta. *co:r*, *cori*, 2353). Two cases that show NDr. *c- < \*c-* before *u*, *u*: are "onomatopoetic", in which divergence from normal phonemic changes may be expected; they are Kur. *surup-* 'to drink noisily' (:Ka. *suruku* 'the sound produced by slipping', 2235) and Malt. *cumq-* 'to kiss'. Br. *cu:p* 'to suck' (:Ta. *cu:ppu*, *cu:mpu* 'to suck', 2154b). In the five etymological groups, DED 2182, 2203, 2217, 2243 and 2244, Kuruk-Malto show *c* before *u*, *u*: but cognates from other languages are not available and therefore these can hardly be used as evidence of anything Proto-Dravidian.

<i>c-</i>	<i>s-</i>	<i>h-</i>	<i>t-</i>	<i>k-</i>	<i>ϕ-</i>
Ta. (spoken <i>s-</i> )	Ko.	Tu. (dialectal) Go. (east & south)	To. Tu. (common)	Kur. Malt. Br.	Ta. Ma. Ko <sup>d</sup> .
Ma.	Ka.	Pe. <sup>4</sup>			Ko <sup>d</sup> .
Ko <sup>d</sup> .	Tu.				Ko.
Ko.	Kol.				To.
(Ka.)	Nk.	Mand.			Ka.
Te. <sup>3</sup>	Nk (Ch.)	Kuwi.			Tu.
Pa.	Ga.	Kui (kuṭṭīa)			Te.
Kur.	Go.	(West & north)			Koya
Malt.	Konda				
Br.	Kui				

Table 5. Reflexes of PDr. \*c-

<sup>3</sup>. In native Telugu words, *c* is a palatal before a front vowel but an alveolar before a non-front vowel. It is always palatal in loanwords from Sanskrit.

<sup>4</sup>. Burrow and Bhattacharya (1970:11) think that \*c > h in Pengo is a recent change since forms with *s-* like *si:-* 'to give', *sil* 'not' and *suṛ-* 'to see' occur in songs.

## Examples:

1005. Ta. *aravu*, *aravam*, *ara*, *ara*: 'snake'. Ma. *aravu*, *aravam* 'serpent'. Te. *tra:cu* 'cobra'. Go. *tara:s* 'snake'. Konda *saras*. Pe. *ra:c*. Mand. *trehe*. Kui *sra:su*, (Mah.) *sra:cu*. Kuwi (Su.) *ra:cu*. (PDr. \**car-*, Proto-Te- Kuwi \**car-ac*; 1949).

1006. Tu. (B) *sa:di*, (C) *ta:di*, *ha:di* 'road, way, path'. Go. (A.Y.) *sari*, (G) *harri*, (S) *hari*, (Mu.) *harr*, (Koya) *ar*. Pe. *hazi*, ? Kuwi (Su) *ji:yu* (1953; cf. Ta. Ma. *a:ru*. To. *o:t* (347) and Ta. Ma. *a:ram* 'dharma' Ka. *a:ra*, *a:ru* (262) PDr. \**ca:t-/-ca!-am*).

1007. Ka. *calame*, *calume* 'small pit, spring of water'; *jalugu* 'place where water drops or oozes'. Tu. *cilimbi* 'a small tank'. Te. *celama*. Kuwi (S) *salma* 'well'; *jalla* 'spring'. Pa. *jalug*, *jalub* 'place where water oozes'. ? Br. *kal* 'place where water collects, waterhold'. (1956 & 1961)

1008. Tu. *selē* 'chink, crack, flaw as in a stone'. Te. *celāgu*, *celagu*, *selagu* 'to cut'; *selā* 'hole'. Kur. *calx-* 'to open, uncover' intr. *calxr-*. Malt. *calG-* 'to split or break open', *calGro* 'torn asunder'. Br. *cal-*, *cale:ng-* 'to become cracked, split'. (1962)

1009. (a) Ta. *ali* (-v-, -nt-) 'to be attached'; (-pp-, -tt-) 'to protect, show favour, n. love, grace, desire'; *aliyan* 'on, who has great love, gracious benefactor; one who deserves protection'. Ma. *aliyan* 'brother-in-law'. Ko. *ayl* 'brother-in-law, male cross-cousin (male speaking); *mal ayl* 'son-in-law who lives in father-in-law's house'. Ka. *aliya* 'son-in-law'. Tu. *aliya*. Te. *allūdu*, *alluvā:du*. (256).

(b) Pa. *calñid* 'bridegroom'. Ga. (Oll.) *salñid* 'son-in-law, younger sister's husband'. Kol *sa:nzin* 'younger sister's husband'; *sanma* 'mother's younger sister', Nk. *sa:nikul*, *sa:njin* 'son-in-law, younger sister's husband'. Nk. (Ch.) *sanjil* 'bridegroom'.

**Go.** *sanne:* ‘son-in-law’; (**A**) *sare:*, (**Mu.**) *hare:*, (**Ma.**) *anne, arne*. **Konđa** *sañin, sanisi* ‘son-in-law’; *sañin ko:ndli* ‘nephew’, **Kuwi** (**P.**) ‘hone, (**F**) *honesi*, ? Br. *sa:lum* (also brother in-law; which is <**IA**, Skt. *sya:la-*). (1970; the connection between the two entries has been suggested in *DEDS*; the PDr. root is \**cal-*)

1010. **Ta.** *aval* ‘rice obtained from fried paddy by pestling it’; *avai* (*pp-*, *-tt-*) ‘to pound in a mortar’. **Ma.** *avil* ‘rice-bruised and dried’; *ave-* ‘to beat rice’ **Ko.** *kac av-* ‘to pestle (millet) second time’; *aky av-* ‘to pestle (millet) third time’. To *af-* ‘to pound with light strokes’; *ofil* ‘puffed rice’. **Ka.** *aval* ‘to pound, n. pounding’. **Kođ.** *avl-akki* ‘rice fried and each grain pounded flat’. **Tu.** *abepu-, abe-, abeccu-* ‘to beat or pound rice’. **Kol.** (**Kin.**) *cavli* ‘mortar’. **Nk.** (**Ch.**) *savli*. **Pa.** *cavil; cawkol* ‘pestle’. **Ga.** *savul* ‘mortar’; *savkol* ‘pestle’. ? **Go.** (**A.Y.**) *cahki*, ‘mortar’, (**G.Mu.**) *cahki*, (**Ma.**) *ahki, a?ki*, (**Koya**) *ahk*. (1976)

1011. **Ta** *ca:* (*cett-*) ‘to die’; *ca:vu* ‘death’. **Ma.** *ca:* (*catt-*) ‘to die; *ca:kku, ca:vu* ‘death’. **To.** *soy-* ‘to die (of others than Todas)’; *so:f* ‘Bađaga funeral’ (both <**Ka.**) **Ka.** *sa:y* (*satt-*); *sa:vu* ‘death’. **Kođ** *ca:l-*; *ca:vu*; **Tu.** *say-;* *sa:vu*. **Te.** *caccu, ca:vu*. **Pa.** *cay-* (*cañ-*); *cañ* ‘corpse’. **Ga.** (**Oll**) *say* ‘to die’; (**S**) *cay-*. **Go.** *sa:-*, (**L**) *ha:-*. **Konđa** *sa:ł-*. **Pe.** **Mand** *ha:-*. **Kui** *sa:ł-*. **Kuwi** *ha:-*. **Kur.** *khe:le-* (*kecc-*) ‘to die’. **Malt** *key-, kagl-*. **Br.** *ka?-* (past *kask-*, neg. *kas-*). (2002; note that NDr. \**ke:ł-/key-<\*ce:-*, variant of \**ca:-*; Br. *a<\*e* is regular).

1012. **Kol.** *sa:r* (**Kin.**) *ca:r* ‘thorn’. **Nk.** **Nk** (**Ch.**) *sa:r*. **Pa.** *ca:ka*. **Ga** (**S**) *cappu:;* (**P**) *sa:p*, **Go.** *sa:p*, (**Mu.**) *ha:p*, (**Ma.**) *a:p(i)*. **Konđa** *sa:mbu* **Kui** *sa:pu*; (**K.**) *ha:pu*. **Kuwi** *ha:pu*. (2035).

1013. **Ta.** **Ma.** **Ka.** **Te.** *a:tu* ‘six’. **Ko.** *a:r*. **To.** *o:ł*. **Kođ:** *a:ri*. **Tu.** *a:ji*. **Kol.** *a:r*. **Nk** (**Ch.**) *sa:di*. **Go.** *sa:ru:ń*, (**Pat.**) *ha:ru:ńg*, (**Koya**) *a:ru*. **Kui** *sa:ja, sajgi*, (**K**) *ha:ja*. (2051)

1013. SDr. *il-* 'to be not'r (Tu. (B) *iddi*, (C) *ijji* 'not to exist' probably from \**iru-* 'to be'.) Te. *le:-* 'to be not'. Pa. *cil-*. Go. *sill-*, (M, Pat.) *hil-*, (Koya) *ill-*. Konḍa *sil-*. Pe. *hil-*. Mand. *la:-*. Kui *sid-*. Kuwi *hill-?* Malt. *cil-* 'to forbid'. (2106)

1014. Ta. *i:* 'to give to inferiors, agree, consent'. Ka. *i:* 'to give, allow, permit' Te. *iccu*. Kol. Nk (Ch.) *si:-*. Nk. *śi:-*. Pa. *ci:-*. Ga. *si:-*. Go. *si:-*, (G. Mu. S.) *hi:-*, (Mà. Koya.) *i:-*. Konḍa. *si:-*. Pe. Mand. *hi:-*. Kui *si:-, ji:-*, (K) *hi:-*. Kuwi. *hi:-*. Kur. *ci?/- (cicc-)*. Malt. *ciy-* (*cic-*). (2138).

1015 Ta. *i:r, irppi* 'nit'. Ma. *i:r* Ko. *ci:r* To. *ti:r*. Ka. *i:r, i:pi, si:r*. Koḍ. *ci:ri*. Tu. (B) *si:ri*, (C) *ci:ri*. *ti:ri*. Te. *i:ru, i:pi*. Kol. Nk. (Ch.) *si:r*. Nk *śi:r*. Go. *si:r, hi:r*, (Koya) *i:r*. Pe. Mand. *hi:r*. Kuwi *hi:ru*. Kur. *ci:r*. (2158)

1016. Ta. Ma. *cuṭu* (*cuṭt-*) 'to be hot, burn'. Ko. To. *tur-* (*tuṭ-*). Ka. *suđu* (*suṭṭ-*). Koḍ. *cuđ-* (*cuṭt-*). Tu. *suđu(pu)-, tuđu(pu)-*. Te. *cū:đu, suđiyu*. Kol. *suđ-(suṭṭ-)*; (Kin. ) *cur-*. Nk (Ch.) *sur- / suđđ-* (*suṭṭ-*). Go. *surr-* (*surt-*), (G. Mu.) *hurr-*. Konḍa *sur-* (*suRt-*). Pe. *huz-* (*hust-*), *huzba-*. Kui *sug-* (*sugd-*). Kuwi *hu:đ-*. Kur. Malt. *kur-* (*kuṭṭ-*). (2183).

1017. Ta. *cuma* 'to carry a burden'; *cumai* 'burden'. Ma. *cuma* 'to carry a burden, n. burden'. Tu. *tumbu-* 'to bear'. Te. *cumma* 'carrying pad'. Kol. (SR., Kin) *kunt-* 'to lift; (W) *kut-* 'to place burden on head'. Pa. *kumt-* 'to carry on head'; *cumṭal* 'carrying pad on head'. Ga. (Oll). *kumt-* 'to carry on head'; (P) *sumṭal* 'head-pad'. Kur. *kum?-* 'to carry on head'. Malt. *kum-*. Br. *kube:n* 'heavy'. (2204).

1018. Ta. *cu:r, curi, curuł* 'to revolve, whirl round, curl, n. whirling, curl'. Ma. *curuł* 'to be curled'. Ko. *curñ-* 'to lie in coils (snake, rope)'. To. *tu:l-* 'to be rolled up'; *tuşk* 'man's curl'; *tu:r* 'storm'. Ka. *surułu, suruñtu* 'to coil', *surku, sukku*

'to curl'. Kod. *turiđ-* 'to be rolled up'; *tore-* '(string) is wound round and round'; tr. *tora-*. Tu. *turđu* 'a female's hair tied into a knot'. Te. *doralu, dollu* 'to roll (intr.)'. Pa. *cird-* 'to turn', *cirl-* 'to revolve', Ga. *sirl-* 'to revolve'. Go. *surund-* 'to go round and round'. Pe. *hu:ṛ-* 'to wind'. Kui. *trong-* 'to roll'; *torg-* 'to writhe'. Kur. *ku:r-* 'to put on and tie a sari round one's waist'. Malt. *kurg-* 'to roll up, wrap up'. Br. *ku:r-* 'to roll up (tr.), make a clean sweep of'. (2211)

1019. Ta. *cułai* 'pulp as of jack-fruit'. Ma. *cuła*. Ko. *toył*. Ka. *tołe*. Te. *tona, tola*. (2229)

1020. Ta. *cu:l* 'to deliberate, consider, select, know'; *u:l* 'to think'; *u:łku* 'to meditate'. Tu. *tu:pu-* 'to see'. Te. *cu:cu* (*cu:đ-* before a suffix beginning with *a* and the imperative sg.). Pa. *cu:ṛ-*. Ga. (Oll.) *su:ṛ-*, (S) *cu:đ-*. Go. (A) *su:ṛ-*, (Tr. M.) *hur-*; (Koya) *u:đ-*. Konda *su:ṛ-*. Pe. Mand *hur-*. Kui *su:ṛ-*. (2257)

1021. Ta. *ceruku, coruku* 'to insert', *cerumu* 'to sink, pierce through'. Ma. *cerutu, coruku* 'to shove in'. To. *teg-* 'to fasten loin-cloth'. Ka. *serku, sekku* 'to shove in, insert'. Te. *cekku, ceruvu*. Kur. *xerr-*. Malt. *qer-* 'to thrust in, tuck in'. (2285),

1022. Ta. Ma. Ko. *ce:r-* 'to arrive, join, be united'. To. *sō:r-* 'to arrive'. Ka. Kod. *se:r-*. Tu. *se:ri-*. Te. *ce:ru*. ?Kur *ker-* (past stem of *ka:-* 'to go').? Br. *ke:b* 'nearness, vicinity, near'; *ke:b kann-* 'to approach'. (2312).

1023. Ta. *e:r* 'plough, yoke of oxen'; *ce:r* (Jaffna). Ma. Ko. To. *e:r*. Ka. *e:ru, a:r*. Te. *e:ru*. Kol. (Kin.) *ce:r*. Pa. *cereyakul* (pl.) 'pair of bullocks'; *nel cer* 'four pairs of bullocks'. Go. *se:r*; (Mu) *he:r*; (Ma) *e:r*. Pe. *he:r*. Kui *se:ru*. Kuwi *he:ru*. (2313)

1024<sub>3</sub> Ta. *aintu, añcu*. 'five'. Ma. *añcu*. Ko. *anj*. To. *iiż*, (TōwfīLy dialect *iij*). Ka. *ay(i)du*. Kod. *añji*. Tu. *ayñi*. Te.

*ay(i)du* (< Ka.), *e:nu*. Kol. *ayd*; *segur* ‘five persons’. Nk (Ch.) *se:ndi* ‘five’. Pa. *ce:du(k)* ‘five things’; *ce:vir* ‘five men’, *ceyal* ‘five women’; adj. *cem/n*. Go. *saiyung* ‘five’; (A) *siyyu:n*, (Pat.) *hayyung*. Kui *singi*, (K.) *se:ngi*, adj. *se:*. (2318)

1025. Ta. *citai*, *ciraku*, *citakar* ‘wing’; *itai*, *itaku*, *itakar*, *itakkai* ‘wing, feather’. Ma. *itaku*, *ciraku* ‘wing’. Ko. *rek* ‘wing; feather’ (< Ka.). Ka. *erake*, *eranke*, *takke*, *tekke* ‘wing’, Ko~~d~~ *rekke* (< Ka.). Tu. *edinke*, *renke*. Te. *eraka*, *rekka*, *rekka*. Kol. *re<sup>a</sup>pa*, (SR) *reppa*: (< Te). Nk. *rekka*, *reppa* (< Te.). Pa(S). *rekka* (< Te). Go (S) *rekka*. Kon~~d~~a *teka*. Kuwi (Su.) *rekka*. (2133; cf. To. *tergy* ‘wing’. Ko~~d~~. *terake*; 2819.)

1026 (= 506). Ta. *coti*, *cori* ‘to itch, n. itching’; *coruntu* ‘to scratch’. Ma. *coti* ‘to itch, n. itch’; *coruku* ‘to scratch gently’. Ko. *toyr-* ‘to itch’; *cor<sup>a</sup>ng* ‘an itch’; *toyr*, *toyrv* ‘*Urtica heterophylla* Decne (causes itching and rash). To. *twary*. Ka. *tut<sup>i</sup>*, *tutike*, *turita*, *turu* ‘itching, scratching’. Tu. *tojji* ‘itching’. Te. *durada*. Pa. *cod-* ‘to itch’. Ga. *soy-*. Go (A) *coh-*, *cohk-*, (G.Mu.) *hoh-*, (Koya) *oh-*. Kui *soha* ‘ringworm’. (2343)

See also examples 577, 617, 762 and 763.

### 23. 2. \*-c-.

23. 2.1. \*-c-: Ta. Ma. -c-. Ko. -c-. To. -s-. Ka. -s-. Ko~~d~~. Tu. -j-. Te. -c-, -s-. Kol. Nk. Nk (Ch.). -s-. Pa. Ga. -y-. Go. Kon~~d~~a -s-. Pe. Manda -h-.<sup>5</sup> Kui -s-, -h-. Kuwi -h-. Kur. Malt. -s-, -j-. Br. -s-. The correspondence for \*-c- and \*-cc- are in part uncertain.

<sup>5</sup> -s is preserved in Pengo word-finally and also before a voiceless stop: *vatus* ‘finger ring’ but pl. *vatuhin*, *maska* ‘mango’, *ast-*, past stem of *ah-* to seize’. Word-final s, however, optionally changes to h before a particle beginning with a consonant, e.g. *hurnas de* or *hurnah de* ‘we will see’. In Manda and in the speech of most easterly Pengos, recorded

\*-c- is weakened to -y- in many cases even in Proto-Dravidian (see 23. 2.2).

1027. Te. *usumu* 'to scour, wash'; *usugu* 'to rub'. Kol. *usm-* 'to wipe', Nk (Ch.) *us-* 'to clean'. Pa. Ga. *uyk-* 'to rub, rub off'. Go. *us(u)m-* 'to wipe'. Malt. *nusg-* 'to rub, clean'. (493)

1028. Pe. Mand. *pih-* 'to leave, abandon'. Kui Kuwi *pih-* 'to release, forsake'. (3405)

1029. Ta. Ma. *ma:cu* 'spot, stain'. Ko. *ma:c* 'dirt on body'. Ka. *ma:su* 'to be dirty, n. dirt'. Kođ. *ma:j-* 'to become soiled'. Kui. *ma:si* 'dirt'. Kuwi (F) *ma:h-* 'to be dirty'. (392<sup>a</sup>).

1030. Ta. *ma:cunam* 'python'. Pa. *ma:yond ba:m*, Go. *ma:su* (3928).

1031. Ta. *vi:cu* 'to throw'. Ma. *vi:cu-*, *vi:šu-*. Ko. *vi:c-*. To. *pi:s-*. Ka. *bi:su*. Kođ. *bi:j-*. Tu. *bi:ji-*. Te. *vi:cu*. (4479).

23. 2.2. Intervocalic \*-c- is often weakened to -y- in many languages; this -y- is also lost resulting in contraction of the preceding and the following vowels. This phenomenon was observed by Caldwell, later by Ramaswami Aiyar (1932b) and Krishnamurti (1961:48-49).<sup>6</sup> Occasionally \* c- changes

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at Talguṛ, *s>h* even before a voiceless stop, e.g. Mand. *mahke* 'mango' (Pe *maska*), Mand. *uhpa* 'to wear' (Pe. *uspa* 'to wear (loin-cloth)'; Talguṛ Pengo *gehpi* 'door' for *gespi* and *pihpa-* intensive of *pih-* 'to leave' for *pispā-*. An example of *-s-* > Pe. *-h-* (other than before a voiceless stop); *hirna* 'gizzard'. Kul, Konḍa (BB) *sirsa* (see Burrow and Bhattacharya 1970:10-11)

<sup>6</sup>. Ramaswami Aiyar (1932b) identified a number of such cases but he argued that *y* is original and *-ś-*, *-j-* (Tulu) and *-s-* are secondary developments. He based his argument on the fact that in Kannada and Telugu *-s-* occurs in words with derivatives. He (1932b:21) says that *y>s* is "ultimately

to *-d-*; see example 1035. Note that *-ś/-s-* > *y-* is also found in Indo-Aryan loans in Old Tamil, e.g. Skt. *a:ka:śa-* > *a:ka:yam* 'sky'; Skt. *deśa* > *te:yam*, *te:m* 'country', *smaśa:na-* > *maya:nam* 'burial ground'; Skt. *taiśa-* > *tai* 'name of a month'.

Since this weakening is very widespread, it must have started in the later stages of Proto-Dravidian.

1032. Ta. *uy* 'to live', *uyir* 'life', *uyirppu* 'reanimation'. Ma. *uyir*, *uśir* 'life, breath'. Ko. *ucr.* To. *ū:r*, *usir*. Ka. *usir*. Kod. *usirī*. Tu. *usili*, *usuru*, Te. *usuru*; *u:r(u)cu* 'to breathe'; *u:rpu* 'breath' Kur. *ujj-* 'to have life, reside'. Malt. *uj-* 'to live'; *uje* 'life'. Br. *ust* 'heart, mind, inside, kernel'. (554)

1033. Ta. *paca* 'to be green', *pacappu* 'green colour'; *pacalai* 'gold colour'; *paccai*, *pacumai*, *pai*, *paimmai*, *paimai* 'greenness'; *pacu* 'green', *payappu* 'gold colour', *payir* 'growing grain, tender sprout'. Ma. *pacu*, *pai*, *paim* 'tender, green'; *paca*, *paśa*, *paya* 'moisture'; *pacca* 'greenness'; *payir* 'green corn'. Ko. *pac* 'green'. To. *poc.* Ka. *pasi*, *pasu*, *pasir*, *pasur*, *pacce*, *pacca*, *paccane* 'greeness, golden colour'; *pasale* 'young grass', *payir* 'green corn'. Kod. *pacce* 'green'. Tu. *pacca*, *pacce*, *paji*; *pajiri* 'grass'. Te. *pacca*, *paccana* 'green'; *pacci* 'raw', *paccika* 'grass'; *pasaru* 'green, juice; *pasi* 'young, tender'; *pasupu* 'turmeric'. *pasiḍi*, *payiḍi*, *paiḍi* 'gold'. Kol. *pasuḍi* 'yellow'. Pa. *pay* 'green' Ga. (S) *pay* 'green'; *pasu:r* 'raw'. (3161; cf. 3248 Ta. *payal*, *paiyal*, *paital*, *pacal* 'boy').

due to the incorporation of a strong breath current to mark off the individuality of the medial syllable of derivatives." He seems to have been too much influenced by the facts that (i) *y* is found in a greater number of languages than *c* and that (ii) literary Tamil *y* is often replaced by *ś/s* in the colloquial, e.g. L. Ta. *muyal* > colloq. Ta. *mosalī* 'hare'.

1034. Ta. Ma. Ko. *poy* 'a lie'. To. *pi:k-* 'to lie'; *pi:ki:tē:r* 'a lie'. Ka. *pusi* 'to lie, n. 'lie'; *pusiga* 'liar'. Malt. *pasyare paslaha* 'liar'; *pasyatr* 'to tell lies'. (< \*poc-; 3702).

1035. Ta. Ma. *peyar, piyar, pe:r* 'name'. Ko. *pe:r*. To. *pō:r, pō:sf-* (*pō:st-*) 'to name'. Ka. *pesan, hesaru* 'name'. Kod. *peda*, Tu. *pudari*. Te. *pe:ru*. Kol. Nk. Nk. (Ch.) *pe:r*. Pa. *pidir*. Ga. (Oll.) *pidir*, (S) *pidi:r*. Go, *parol*, (A) *phoro:l*, (Koya) *pede:r*. Kon̄da (BB) *do:r*. Pe. *to:r*. Mand. *dar*. Kui *pa:da*, (K) *pa:ru*. Kuwi (F) *do:ru*, (Su.) *do:ru*, (D) *da:ru*. Kur. Malt. *pinj-* 'to name'. Br. *pin* 'name'. (3612)

1036. Ta. *mucar, mo:r* 'buttermilk'. Ma. *mo:r*. Ko. *moer*. To. *mo:r*. Ka. *mosar(u), masaru* 'curds'. Kod. *mo:ri* 'buttermilk'; *kaṭṭi mo:ri* 'curd'. Tu. *mosaru* 'curds' (< Ka.) ? Br. *maring-* 'to form into curds, curdle'. (4015)

See also examples 622 and 1095.

Burrow (1968:153) has already noted that \*-c- entirely disappears in Ta. *palavu, pala:, pila:* 'jack tree'. Ma. *pila:vu, pla:yu*; Ko. *pala:v*, To. *pasof* (3290; cf. Ka. *panasa, palasa, palasu, halasu*, Kod. *palaci*, Te. *panasa*, Pa. *penac*. Ga (Oll.) *panis*); another example for this development is Ta. *kaya:, kajavu* 'dream'. Ma. *kina:vu*, To. *konof* (1184; cf. Ko. *kancn*, Ka. *kana(su), kanasa*, Kod. *kenaci*, Go. *kanjk-* 'to dream')

### 23. 3. \*-cc-

23.3.1. \*-cc-: Ta. Ma. -cc-. Ko. -c-. To. -c- [ts]. Ka. Kod. Tu. Te. Kol. Nk. Nk (Ch.). Pa. V]-cc-, V]-c-. Ga. Go. V]-cc-, V:] -s-. Kon̄da -s-. Pe. Mand. -c-. Kui -s-. Kuwi -cc-, -c-. Kur. -cc-. Malt. -c-. Br. -s-, -sh-.

Examples:

1037. (= 208) Te. *giccu* 'to scratch, pinch'. Nk. (Ch.) *kis-/kicc-* 'to pinch'. Pa. *kicc-* 'to pluck strings of instrument'.

Ga. *kicc-* 'to pluck'. Go. *kicc-* 'to pluck green leaves for salad', (M) *kic-* 'to pluck'. Pe. Mand. *kic-* 'to pinch'. Kui *kis-*. Kuwi *kic-*. Kur. *kicc-* 'to break into very small pieces'. (1271)

1038. Pa. *mac-* 'to rub head with earth'. Br. *mash-* 'to wash the head, clean the head with fuller's earth'. (3785)

See also examples 622 and 1033.

#### 23.4. \*-ñc-.

23. 4.1. \*-ñc-: Ta. -ñc-. Ma. -ññ-, -ñc-. Ko. -nj- To. -z-, [dz]. Ka. -ñj-. Kod. -ñj-, -ññ- Tu. -ñj-/ññ-. Te. Kol. Nk -ñj-. Pa: Ga. -ñ- (-ñj-). Go. Konda Pe. Mand., Kui Kuwi -nj-. Malt. -nj- (Note that since -ñc- after a long vowel is extremely rare, the above correspondences are for \*-ñc- after a short vowel). See 22. 5. for the Malayalam developments.

1039. Ta. Ma. *añcu* 'to fear'. Ko. *anj-*. To. *oz*, (*oj-*, \*ñci > j) Ka. Tu. Te. *añju*. (51)

1040. Ta. *nañcu* 'poison'. Ma. *naññu*. To. *noz*, Ka. Tu. *nañju*. Pa. *neñj*. (2955)

1041. Ta. *neñcu*, *neñcam* 'heart, chest, courage', *neñcuł* 'mind'. Ma. *neñcu*, *neññu*. Ko. *nanj* 'heart'. To. *niz*, 'heart, dewlap'. Ko. *neññi*, (Mercara dialect) *ñeññi* 'chest of body' Te. *nenjili* 'distress'. Pa. *diññi* 'pith'. Konda (BB) *ninjam* 'chest'. Pe. *nenjan*, *nenja-daki*, *nenja* 'pith (of a coconut)' Mand. *nenja-daki* 'chest'. Kui *ninja* 'heart of a tree, pith, strong'. Kuwi (F) *linja* 'kernel'.? Kur. *nisand* 'core or hard wood of a tree'. (3097)

1042. Ta. Ma. *tuñcu* 'to sleep'. Pa: *tuñ-*, (S) *cuñ-*. Ga. *tuñ-*. Go. *sunj-*, (L.M.) *hunj-*. Konda (Sova dialect) *sus-*; (BB) *sunz-* Pe. Mand. *hunj-*. Kui *sunj-*. Kuwi (Su.) *hunj-*. (2693)

See also example 765.

As has been stated earlier, retroflexes and alveolars do not occur in word-initial position in Proto-Dravidian (see Chapter 16).

24. 1. \*-f- AT

24. 1.1. T\*<sup>-t-</sup> Ta. Ma. -f- [d]. Ko. -r- (one flap). To. -r- (voiceless trill), -d- (in loans). Ka. Kod. Tu. Te. -d-. Kol (Wardha) -d-, (Kin) -r-. Nk. Nk(Ch.) -r-. Pa. -d-. Ga. -r-, -rr-. Go. -r-, -rr-. Konda -r-, -r-. Pe. -z-, -d-. Mand -r-. Kui. -d-, C] -r-, -j-. Kuwi -r-, -y-. Kur. Malt. -r-. Br. -r- -r-, -rr-.

See examples 1, 8, 24, 146, 205, 505, 507, 775, 936 and 1016.

#### 24.2. Toda and Kota reflexes

24.2.1. In Toda, -r- is the normal correspondence; -d- also occurs in a number of cases. No phonological conditioning for the two correspondences can be given; moreover, in some of the words with -d- there are other indications to consider them as loans. Therefore, we have to conclude that -r- is the native Toda development and that words with -d- are loans.

Note the following contrastive pairs:

To. <i>o:d-</i> 'to dance, move voilently' (:Ta. <i>a:tu</i> , 290)	To. <i>wi:ṛ-</i> 'shell, tile, skull' (:Ta. <i>o:tu</i> ; 878)
To. <i>wi:ḍ-</i> 'to run' (:Ta. <i>o:tu</i> , 877)	To. <i>po:ṛ-</i> 'to sing' (:Ta. <i>pa:tu</i> ; 3348)
To. <i>iḍ-</i> 'to put' (:Ta. <i>i:tu</i> ; 375)	To. <i>pīṛ-</i> 'to release' (:Ta. <i>vītu</i> ; 4419)

Doublets like the following clearly indicate that words with *-d-* are loans: *nōṛ-* 'to walk, happen', *naḍ-* 'to happen', *nāṛt-* 'to make to walk', *naḍt-/naḍc-* 'to conduct, organize' (2957), *moṛk-* 'to fold, n. a fold', *moḍk-* 'to defeat in argument' (3796). Some words that contain *-d-* (< \**-t-* as *ku:d-*); '(others than Todas) marry' (:Ta. *ku:tu* 1562), *udp-* 'dress of non-Todas' (:Ta. *uṭuppu* 'clothes', 502), *kōḍc-* 'to destroy' (along with *kōrc-* 'to kill by witchcraft': Ta. *kētu* 'to be destroyed; 1614) and *tomk wāḍ-* 'to beat drum' (:Ta. *putai*; absence of *p-* in To. indicates that it is a loan from Baḍaga; 3493) are identifiable as loans on semantic or phonological grounds.

It will be a little disappointing to find that the intransitives in the following intransitive — transitive pairs are loans:

<i>odg-</i> 'to be quiet' (:Ta. <i>aṭanku</i> )	<i>ork-</i> 'to subdue' (Ta. <i>aṭakku</i> ; 56a)
<i>odg-</i> 'to be piled up' (< * <i>atunk-</i> )	<i>ork-</i> 'to pile' (:Ta. <i>aṭu- kku</i> , 70)

But it has already been pointed out that To. *g-* < \**-ṅk-* after the reconstructed second vowel occurs only in loans (see 22.7.); these words must be loans even on that score.

In Kota too, *r* < \**-t-* is the normal development and words with *d-<\*-t-* are not as many as in Toda; all such

words must be considered as loans. Compare *id-* 'to put, fix' (:Ta. *iṭu*; 375) with *vīr-* 'to leave' (:Ta. *vīṭu*; 4419); words like *ad̄m* 'two-anna piece' (:Ka. *ad̄ḍa*; 94), *od̄-* to set '(net, spring-trap)' (:Ka. *od̄du*, 811), *od̄* 'slope of hill' (:Ka. *od̄du* 'bank' : 814) and *dod̄* 'big, great' (:Ka. *dod̄da*; 2875) are evidently loans from Badaga.

#### **24.3 \*-t- > -r- in Toda, Old Telugu, Gondi - Kuwi and Brahui**

24.3.1: In a few cases, Toda contains the aberrant correspondences \*-t- >-r/-d- (Emeneau 1970a: 104–105); e.g.: To. *pīṛy* 'dust' < \**poṭi* 'powder, dust' (3667); To. *noḍx-* 'to shake, shiver, tremble' (:Ta. *naṭunku*, 2960); To. *kwīḍy* 'a family of children' < \**kuṭi* 'house, family' (1379) and To. *kuḍy* 'pit, mortar' <*kuḍy-* 'to have a shallow hollow' (:Ta. *kuṭai* 'to scoop, hollow out, bore', 1383).

24.3.2. In Old Telugu, a few verbs ending in *du* change the *d* to *r*/*t* before the transitive suffixes *-cu* and *-pu* (see *Balavaya-akarāṇamu*, *Kriya:paricche:damu*, sutras 80–83): *a:r(u)cu* 'to make to play, move (tr)', tr. of *a:du* 'to move, dance' (290), *o:r(u)cu* 'to defeat' tr. of *o:du* 'to be defeated' (877), *ku:r(u)cu* 'to join (tr)', tr. of *ku:du* 'to join' (1562), *cērucu*, *cērupu* 'to spoil (tr)' tr. of *cēdu* 'to be spoiled' (1614), *parucu* 'to make to suffer', tr. of *paḍu* 'to suffer' (3190; cf. *veluvārincu*, *veluvārucu* 'to make to come out', tr. of *veluvaḍu* (*vadu* < \**paḍu*) 'to come out'). This alternation is absent before the other transitive – causative suffix *-incu*, for example, *a:d-incu* 'to make to play'; moreover, other verbs ending in *du* do not take the suffix *-cu*, *-pu* and consequently do not show the alternation, for example *pa:du* 'to sing'; causative *pa:d-incu*. From this, we can conclude that pre-Telugu *-d-* > Old Te. *r* before *c* or *p* in these cases (*r* merged with *r* immediately before a consonant).

24.3.3. On the other hand, in the Gondi-Kuwi group (i.e. Gondi, Konda, Pengo, Manda, Kui and Kuwi) the change  $*-t-$  >  $*-t\text{-}$  is fairly common. The merger of PDr  $*-t\text{-}$  and  $*-t\text{-}$  into  $*-t\text{-}$  must have taken place in the Proto-Gondi-Kuwi period; later the  $*-t\text{-}$  developed differently in each of these languages (Go.  $-r-$ ,  $-rr-$ , Konda  $-t\text{-}$ , Pe.  $-z-$ , Manda  $-y-$ , Kui  $-j-$  and Kuwi  $-y-$ ,  $-r-$ ; see Burrow and Bhattacharya 1963:236; 1970:12; Subrahmanyam, P.S. 1968a:174). This is one of the important isoglosses that unite these languages as a subgroup. Examples:

1043. Go. (Tr.) *wo:r-*, (A) *o:r-* 'to be broken (as pot); (Tr. etc.) *urūn(g)* 'to be broken'. Kui *o:j-* 'to be burst, broken'. Kuwi (Su.) *o:y-* (<Proto-Go. Kuwi  $*o:t\text{-}$  < PDr.  $*o:t\text{-}$ ; cf. Kol. Pa. *o:d-*, SDr.  $*o:t\text{-}i$  / -ay; 799)

1044. (= 772) Go. *ko:r* (obl. *ko:t\text{-}*) 'horn of cattle or wild animals, branch of a tree'. Kui *ko:ju* (<Proto-Go-Kuwi  $*ko:t\text{-}$  (< PDr.  $*ko:t\text{-}$ ; cf. Ta. *ko:tu*; 1824).

1045. Go. *na:r* (obl. *na:t\text{-}*) 'village'. Konda *na:r* (*na:t\text{-}*). Pe. *na:z/na:s* (*na:t\text{-}*). Manda *na:y* (*na:t\text{-}*). Kui *na:ju*, Kuwi (Su.) *na:yu* (< Proto-Go. -Kuwi  $*na:t\text{-}$  < PDr.  $*na:t\text{-}$ ; cf. Ta. Ma. *na:tu* (*na:t\text{-}*) 'country'; 3012)

1046. Go. *norr-* (A) *nor-* 'to wash'. Konda *nor-* Pe. *noz-*, *nuz-*. Manda *nuy-*. Kui *nog-*. Kuwi (Su.) *nor-* < Proto-Go.-Kuwi  $*nor\text{-}$  < PDr.  $*no:t\text{-}$ ; cf. Ta. *nuṭakku*, Kol. *oḍ-*, Pa. *nod-*. Ga. (Oll.) *nor-*, (S) *norr-*; 3136)

See also example 1016.

In Pengo, there are also cases in which *-d-* is preserved, e.g. *o:da* 'goat' (Kui *o:da*), *ko:di* 'cow (Kui *ko:di*) *ad-* 'to be able' (Kuvi *ad-*, Konda *at\text{-}*) etc. (see Burrow and Bhattacharya 1970:13)

24.3.4. In the opinion of Emeneau (1971:190), PDr. \*t and \*l fell together in Brahui; both of them show the developments *r*, *rr*, *r* and *d* and, in addition, \*l shows loss too. It must also be noted that the sound that resulted from the merger of \*t and \*l later fell together with PDr. \*r and \*t; this is evident from the fact that the latter two sounds also, like PDr. \*t and \*l, have the reflexes *r* and *rr* in Brahui. The meagreness of the material does not allow any statements of conditioning.

(a) Br. *r* < \*t (one certain item (the first listed, three uncertain ones).

1047. Br. *to:n-* (*to:r-* *to:-*) 'to hold, maintain, restrain' ; Ta. *toṭu* 'to touch'. Malt. *to:r-* 'to string the bow'. (2865)

1048. Br. *xarma:* 'wolf': Ta. *kaṭama:(y)* 'bison'; *kaṭamai*, *kaṭampai* 'elk'. (935).

1049. Br. *xar* 'ram', *xara:s* 'bull, bullock' : Ta. *kaṭavu*, *kaṭa:*, *kaṭa:y* 'male of sheep or goat, he buffalo'; *kiṭa:* 'buffalo, bull, ram'; *kiṭa:y* 'male of sheep'. (943)

1050. Br. *xare:n* 'bitter' : Ta. *kaṭu* 'bitterness'. Kur. *xarxa*, 'bitter'. Malt. *qarqe*. (952; a remote possibility is 1227).

(b) Br. *rr* < \*t; an uncertain correspondence, since found only in two uncertain items.

1051. Br. *xarr-* 'to proceed on foot, make one's way' : Ta. *kaṭa* 'to pass through' (929; another possibility is with 1142)

1052. Br. *durr-*, *durre:ng-* 'to dare, venture' : Ta. *toṭu* 'to begin'. Malt. *torg-* 'to be in readiness for action'. (2866)

(c) Br. *r* < \*t with metathesis/aphaeresis (one item).

1053. Br. *trukk-* 'to pluck off, pluck, strip' : Kur. *turux-* (S 528).

(d) Br. *r* < \**t̪* (six certain items, one uncertain item (listed at the end)).

Br. *xar* 'ram'. (example 1049)

1054. Br. *cūr-*, *cure:ng-* 'to get soaked' (< \**cot̪-V-*; cf. Ta. *cotti* 'to fall in drops'; 2324)

1055. Br. *tar-* 'to cut, slaughter' : Ta. Ma. *tati* 'to hew down, cut off, kill'. (2458)

1056. Br. *turing-* 'to become undone (of stiches), clear (of clouds), separate (of milk): Malt. *turG-* 'to break (as a stick)'. (2712)

1057. Br. *mutyk* 'stopper, bung': Ta Ma. *mutakku* 'to stop, prevent, n. hindrance'. (4042)

1058. Br. *mir-* 'to drive away' : To. *mi:r-*, *me:r-* 'to drive (buffalos) on migration'. (S 791)

1059. Br. *arys-* 'to turn something back or round, change, recover', *arse:ng-* 'to turn oneself back (or round, return)': Malt. *eyar-* 'to keep aloof, get away'. (379)

(e) Br. *d/d̪d* < \**t̪* (one item):

1060. Br. *tad*, *tadde* 'power to resist' : Ta. Ma. *taṭu*, *taṭa:* 'to hinder, stop'. (2460).

24. 2. \*-*tt̪-*.

24. 4. 1. \*-*tt̪-*: Ta. Ma. -*tt̪-* Ko. To. -*t̪-*. Ka. Koḍ. Tu. Te.

Kol. Nk. Nk (Ch.). Pa. Ga. Go. V] -*tt̪-*, V:] -*t̪-*. Konda Pe. Mand. Kui Kuwi -*t̪-*. Kur. -*tt̪-*, -*t̪-*. Malt. Br. -*t̪-*.

See examples 14, 146, 206 (Br. *irat̪* < \**irat̪t̪ay* 'pair'), 927 205, 507, 936 and 1016; the past stems in the last four).

## 24. 5. \*-nt-.

24.5.1. \*-nt-: Ta. Ma. -nt-. Ko. -d- (-nd-). To. -d-. Ka. Vi] -nd-, (elsewhere) -d-. All others -nd- (sometimes spelled -nd-; note that in Old Telugu V:NP>VB and V:NPP>VP).

1061. Ta. *manṭai* 'head, skull'. Ma. *manṭa*. Ko. *mand*. To. *mad*. Ka. Ko. *mande*. Tu. *mande*. (3831)

1062. Ta. *ya:n̥tu*, *a:n̥tu* 'year, age'. Ma. *a:n̥tu*. Ko. *o:r a:r* 'one year'; *i:m a:r* 'two years'. To. *wi:r o:r* 'one year'; *i:r o:r* 'two years'; *ko:d* 'last year'. Ka. *e:du* 'year' Ko. *a:ndi*. Tu. *iyyodū* 'this year'; *mu:vodū* 'last year'. Te. *ē:du*, *ē:da:di* 'year'. Kol. *e:d*. Nk. *iyer* 'this year'. Nk (Ch.) *iya:nd*. Pa. *iyad*. Ga. (Oll.) *iya:nd*. Go. *e:nd* 'year'. Konda. *e:nda:d*; *yo:nd* 'this year'. Pen. *iyondin* 'this year'; *ra:tihin* 'last year'. Mand, *i:yu* 'this year'; *ra:tihin* 'last year'. Kui. *ra:ndu* 'last year'; *ro:ndu* 'in a previous year, year before last'; *va:rondi* 'next year, year after next'; (K) *o:ndu* 'a year'. Kuwi (Su.) *i:yona* 'this year'; (S) *ra:ndu* (T) *ra:ndu* 'last year'. (4230)

See also examples 206, 254 (past stem), 256 (\*unt-) and 339 (past stem).

## 24.6. Kota -d-, -nd- &lt; \*-nt-.

24.6.1. Kota has instances for both -d- and -nd- (< \*-nt-) but it is not possible to give any conditioning for these divergent developments; cf. *mand* 'head' < \**manṭay* (example 1061) and *pid* 'pudendum muliebre' (:Ta. *punṭai*, DED 3509). It is significant that in the past stems of verbs \*-nt- regularly loses the nasal (see examples 254; 339 and *kad* (< \**kant*-, past stem of *kan-/ka:n-* 'to see, DED 1209); the nasal is lost also after a long vowel (see example 1062). In a few cases there is free variation, for example, *tad*, *tand* 'stem of plant, trunk of tree' (:Ta. Ma. *tanṭu*, DED 2484). It seems to be reasonable to take -d- as the native Kota development and to consi-

der words with *-ṇḍ-* as loans form either Tamil or Baḍaga, taken after the operation of *\*-ṇṭ->-d-*. (Note that in 22.6. it has been argued that *\*-ṅk->-g-* is the native development and that words with *-ṅg-* are loans). This conclusion is supported by the fact that *piḍ* (see above) and *med* 'dullness (of knife)' (:Ka. *monṭu*, *monḍe* 'blunt; 4199) which are decidedly native words because they show fronting of the back vowel, lost the nasal while *anḍy* 'pot' (:Ta. *anṭai*, Ka. *anḍe*, DED 110), which is a loanword (because it shows *y<-ay*) retains the nasal. Then, words like *māṇḍ* 'head' have to be considered as loans taken before the operation of the change *\*-ay > φ*; further support for the above conclusion comes from *gond* 'knob, head of pin'; *kond* 'knot of hair' (:Ta. *konṭai*, Ka. *konde*, *gonde*, DED 1733) which retain the nasal and are otherwise identifiable as loans (i.e. because they do not show the change *\*o > Ko. e* before *\*-ay*; see Emeneau 1969a:28).<sup>1</sup>

These loans indicate that the change *\*-ṇṭ->-d-* took place some time between the completion of the change of fronting of back vowels and the change *\*-e > φ*.

Other Kota words with *-ṇḍ-* that can now be considered as loans include *tunḍ* 'piece' (:Ta. Ma. *tunṭam*, Ka. *tunḍu*, DED 2712), *dunḍ* 'elephant's trunk' (:Ta. *tunṭam*, DED 2713) and *gaṇḍ* 'male' (< Ka. *gaṇḍu*; DED 986)

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<sup>1</sup>. However, one word identified as a loan by Emeneau (1969a: 29), i.e. *toḍ* 'throat' (:Ta. *tonṭai*, DED 2879) shows the loss of the nasal. It must have entered Kota before the operation of *\*-ṇṭ->-d-* but after the operation of the fronting rule.

\**t* (or \**t̪*)

For the occurrence of \**t* in the word-initial position in Telugu -Kuwi, see chapter 16.

### 25.1. \*-*t*- (or \*-*t̪*-).

25.1.1. \**t*-: Ta. Ma. Ka. Te. -*t*-. To. -*t*- (a voiceless alveolar trill). Ko. Kod. -*r*-. Tu. -*d*-, -*j*-, -*r*-. Kol. NK. Nk (Ch.) -*d*-, -*r*-. Pa. -*d*-, (NE) -*d̪*-. Ga. -*y*-. Go. -*r*-, -*rr*-, -*r̪*-. Konda. -*t*-. Pe. -*z*-. Mand. -*y*-. Kui -*j*-, C] -*r*-. Kuwi -*r*-, -*y*-, -*?r*-. Kur Malt. -*s(s)*-, -*r(r)*-. Br. -*r*-, -*rr*-.  
*Examples:*

1063. Ta. *kutanku* 'thigh'. Ma. *kutaku*, *kutavu* 'quarter of animals, ham, thigh, loins'. Ko. *korg* 'thigh'. Te. *kutuvu*. Kol. *kudug*. Pa. *kudu*, (NE) *kudu*. Ga. (Oll.) *kuyug*. Go. *kurki*:. Konda. *kutgu* (pl. *kuRku*). Kui. *kuju* (pl. *kuska*), *kuj(u)gu*. Kuwi (F) *kudgu*. Kur. *xosga*:. Malt. *qosGe*. (1527)

1064. Ta. *ya:tu*, *a:tu* (obl. *a:t̪tu*-) 'river', brook'. Ma. *a:tu*. Ko. *peyy-e:r* (obl. *peyy-e:t̪-*), Te. *e:ru* (obl. *e:t̪i*-). Pa. *per-ed* (per- 'big'). Ga. (P) *ber beret* 'big river'. Go. *e:r* (obl. *e:t̪-*) 'water', (W. Ph.) *etk* 'thirst'. Konda *e:ru* (obl. *e:R-*) 'water'; *e:Rki* 'thirst'. Pe. *e:zuñ* (pl.) 'water'; *e:s* (in cpds.); *e:tski* 'thirst'. Mand. *ey* 'water'; *ehki* 'thirst'. Kui *e:ju*

'cooked rice, rice water, gruel'; (K) *e:ju* 'water'; *e:su* (in cpds.); (W) *e:ski* 'thirst'. Kuwi *e:yu* (pl) 'water'; *e:ski* 'thirst'. (4233; the word for 'thirst' in Proto-Go. - Kuwi is \**e:tki*).

1065. Ta. *vigaku* 'firewood'; *vira:y*. Ma. *viñku*. Ko. *verg*. To. (probably) *peñx*. Tu. *bijikre*, *bejakire* 'dried leaves used as fuel'; *biriñji* 'slender piece of firewood'. Koraga. *biji* 'fire wood'. Go. (G) *verrki*, (Mu.) *vark*, (Ma.) *vahk*, *vehki*, (Koya) *verki*. Kond. *vergu* (pl. *veRku*). Pe. *vezgu* (pl. *vesku*). Mand. *vijke*. Kui *veju*, *vejgu* (pl. *veska*). Kuwi (Su.) *vegu* (pl. *veska*); (P) *vergu* (pl. *verka*). (4467)

1066. Nk. (Ch) *madge* 'mango'. Pa. *medi*. Ga. (Oll.) *maygil*, *mayga*; (S) *maygga:*. Go. *marka*; Konda *marKa*. Pe. *maska*. Mand. *mahke*. Kui. *maha*; (K) *maha'a* Kuwi *mah'a*. (3907)

See also examples 31, 144, 337, 467, 506, 603, 604, 608, 609, 612, 623, 754, 769, 779, 1013 and 1025.

25.1.2 There is conclusive evidence to say that the alveolar trill *r* of Old Tamil, Malayalam, Old Kannada and Old Telugu was a plosive (\*!) in Proto-Dravidian (Ramaswami Aiyar 1937; Bh. Krishnamurti 1961:44). Apart from the languages listed above, the trill *r* is still preserved as distinct from the flap *r* in Toda (in which it is a voiceless trill) and in Konda. The following are evidence that the sound concerned was originally a plosive;

1. Like plosives and unlike non-plosives it occurs in post-nasal position, i.e., in the combination Ta. -*nr-* (<\*-nṛ-). Kota and Toda still retain the plosive pronunciation of it in this combination.

2. In Old Tamil, it takes the enunciative vowel like the other stops (note that *Tolka:ppiyam*, *Eļuttatika:ram*, sutra 19 considers *r* as a *valleyutu* i.e. plosive along with *k*, *c*, *t*, *p*). In other words, *r*, like the other plosives does not occur word-finally without the enunciative vowel.

3. Malayalam still retains the original (alveolar) plosive pronunciation of it in gemination. Kota and Toda also retain the plosive pronunciation of the original geminate although the gemination is simplified in them. Additionally, as has been pointed out above, these two languages have preserved the plosive in the combination  $*-n\!t-$  in the shape of  $-n\theta-$ . Irula, Pa:lu Ku:zumba, Be:tta Ku:zumba and Pa:ziyan also have retained  $r$  ( $< *!$ ) and  $t$  ( $< *!!$ ) without merger (so Zvelebil 1980:18-19).

4. In the post-nasal position and in doubling, it merges with other plosives (dental, retroflex and even palatal) in many languages (see below). This type of merger with some other plosive even when it is non-geminated is found in Tu:u, Kolami, Naiki (Chanda) and in Parji.

As has been observed by Krishnamurti (1961: 31) the change of the original alveolar plosive to a trill is part of the general process of weakening or spirantization of plosives in the intervocalic position (see 20.2.). It must have taken place in the later stages of Proto-Dravidian itself because the trill occurs in the majority of the daughter languages.

25.1 3. In the older stages of the three literary languages, Tamil, Kannada, and Telugu, the trill  $r$  ( $< *!$ ) was generally kept distinct from the flap  $r$  but in the modern standard colloquials it fell together with the latter. However, the Kanyakumari dialect (and probably the Jaffna dialect) of Tamil and the Kannada dialect spoken by the Seliga tribe in the Biligirirangan hills still keep them apart as do modern Malayalam, Toda and Kon:ga. Evidence from the inscriptions in the three languages, Tamil, Kannada and Telugu indicates that in the spoken varieties of these,  $r$  merged with  $r$  at a very early time although they were kept distinct by and large

in the written form. In one 12th century Tamil inscription, *nirutta* for *nirutta* 'that which was established' occurs and this indicates that even by the 12th century *t* was confused with *r* in spoken Tamil (see Shanmugam 1968: 88). Such confusion occurs in inscriptions from the 10th century onwards. In Kannada too, usage of *r* for *t* occurs for the first time in one 12th century inscription (so Narasimha 1941: 25); further the 11th century grammarian Na:gavarma in his *ka:vya;valokana* has observed that *t* changes to *r* before a consonant. In the inscriptions of Telugu, the merger of *t* with *r* was attested much earlier than in Kannada and Tamil, one inscription of the 4th-5th century contains the word *ceruvu* 'tank' with *t* as is to be expected but the variant with *r*, i.e. *ceruvu* also occurs in the same inscription (so Radhakrishna 1971:lxxx). The confusion of the two sounds is very common in the inscriptions from the 7th century onwards; in these, there are also cases of *r* being wrongly spelt with *t* (see Mahadevasastri 1969:46). Even in literary works which generally make a distinction between the two sounds, alternant forms occur: *erāgu*, *erāgu* 'to bow' (:Ta. *iṭāṅku*), *paṭru*, *patru* 'to run' (:Ta. *pa:ṛu*): in *u:ru* 'to ooze' (:Ta. *u:ṛu*) and *cerugu* 'to winnow' (:Ma. *ce:ṛu*) *r* occurs instead of the *t* expected on comparative grounds (see Krishnamurti 1961:46). In the classical language, the change of *t* to *r* occurs before a consonant as in *ma:ṛu* 'to change', tr. *ma:r-cu*, which is well attested.

25.1.4. Regarding the three Tuṛu reflexes, *-d-*, *-j-* and *-r*, Shankara Bhat (1966a) gives their distribution as follows: *-r* after a consonant, *-j-* before *i* and *-d-* intervocally (i.e. when the following vowel is other than *i*). He considers words like *gari* 'feather'; *ja:ṛi-* 'to slip' with *r* in the inter-vocalic position as loans from Kannada. Note that \*ṇṛ also

changes to  $-ñj-$  before *i*. The following examples may be noted.

For *r*: *arve* 'cloth' (:Ka. *aṛive*, 268); *nurpu* 'to crush' (:Ta. Ka. *nu:su*, 3089), *urlu* 'noose' (:Ma. *uṛi*, 564).

For *-d-*: *ade* 'inner room' (:Ta. *aṛai*, 272); *kide* 'cowshed'; *kedu* 'tank' (:Ka. *keṛe*, 1648), *tude* 'river' (:Ta. *tuṛai*, 2773), *ke:di* 'mud' (:Ta. *ce:ṛu*, 1680), *kudke* (probably < \**kudVke* 'fox' (:Ma. *kuṛukkan*, 1537), *nu:di* 'hundred' (:Ta. Ka. Te. *nu:ṛu*, 3090).

For *-j-*: *kajipu* 'curry' (:Ta. *kaṛi*, 1171), *baji* 'mere' (:Ka. *baṛi*, 4299), *a:ji* 'six' (:Ta. Ka. Te. *a:ṛu*, 2051), *peji* 'to pick up' (:Ta. *peṛukku*, 3623).

25.1.5. In Parji, a clear-cut dialect division can be observed in the case of the development of PDr. \**r*. PDr. \**r*, \**ṇr* and \**ṭr* change into dentals (*d*, *nd* and *ṭt*) in the north-western and southern dialects but they change into retroflexes (*ɖ*, *ɳɖ* and *ʈʈ*) in the north-eastern dialect (see Burrow and Bhattacharya 1953: 4-5). This dialectal division indicates that the original alveolar articulation was preserved in Parji till very recently, that is, till the time before which the language developed dialectal variation; see examples 1063, 1069 and 1071.

25.1.6. According to Burrow and Bhattacharya (1960: 76-77) \**r* (< \**f* or \**t*) is preserved (as distinct from \**r*) in some of the Gondi dialects, i.e. those in the remoter parts of Chanda, Bastar and the Koya area of Malkangiri; in the Hill-Maria dialect it is changed into a post-velar voiced fricative (*ṛ*; it has been transcribed by Burrow and Bhattacharya 8 but by earlier writers *gh* or *g*); it becomes voiceless before a voiceless plosive. In the northern dialects, the eastern Muria and in Koya, \**r* changes to *r* but \**r* corresponds to what has been transcribed *rr* after a short vowel (the phonetic nature of this *rr* is not yet clear); but after a long vowel only *r* but not

*rr* is found to occur in these dialects. \**r* completely merged with \**r* (both > *r*) only in the western dialects of Adilabad and Yeotmal.

5.1.7. Pengo *z* represents both *r\** and *\*t* (see 24.3.3!) it changes to *s* before a voiceless stop, e.g. *huz-* 'to roast' (< \**cuf-*), past stem *hus-t-* (example 1016); *e:zuñ* 'water' (< \**ya:t-*) but *e:ski* 'thirst' (example 1064); in the final position some speakers have *s* instead of *z*, e.g. *na:z* / *na:s* 'village' (< \**na:t-*), *ni:z* / *ni:s* 'ashes' (< \**ni:t-*).

25.1.8. In Kuwi \**r* (< \**t* and *\*t*) commonly changes to *r* but in some cases it changes to -y- and in some others to -?- (glottal stop); examples for -?-: *de:-* 'to open' (\**ter-*, 2667), *da:-* 'to cut' (\**tar-*, 2562). More work on this aspect needs to be done (see Burrow and Bhattacharya 1963:240-241).

25.1.9. It is to be noted that in Konda, Pengo, Manda Kui and Kuwi (and also in the Hill-Maria dialect of Gonđi) the reflexes of \**r* change to their respective voiceless sounds before a voiceless consonant (see examples 1064 (the word for 'thirst') and 1066). The reflexes in this position are identical with those of \**t*. This development seems to be another shared innovation in this group (see Burrow and Bhattacharya 1963:241).

25.1.10. Kuruk has the three reflexes *s/ss*, *r/rr* and  $\phi$  for \**r*. According to Pfeiffer (1972:153), *s/ss* is the regular reflex; cf. *pisa* 'afterwards' (:Ta. *piraku*, 3452); *pes-* 'to gather up' *peseg-* 'to weed' (:Ta. *perukku* 'to gather', 3623); *ass-* 'to beat' (:Ta. *arai*, 270); *ta:r-* 'to fell (tree)' (:Ta. *tari* 'to cut off'; 2562); *purra* 'dove' (:Ta. *pu:at*, 3555); examples for  $\phi$ : *xada*, *xadd* 'child, young animal' (:Ta. *kantu*, *kañu* 'calf', 1187); *tub-* 'to stuff or cram into' (:Ka. *turubu*, 2770); *ecch-* 'to dash a liquid out or over' (:Ta. *erru*, *irai*, 735).

25.1.11. In pre-Brahui, \*t fell together with \*l, \*t, and \*r as noted by Emeneau (1971). The reflexes of it are r and rr. (Note that in nouns ending in r, it is lost before the plur-k and the oblique -t-).

(a) Br. r < \*t (nine certain items and one uncertain item (given at the end)).

*ur-* 'to look, wait for, consider' < \*ur- (610)

*are:* 'male, husband' < \*e:t- / \*et-V-. (777)

*xar* 'angry' < \*kat-. (1175)

*kire:ng* 'abuse', *kirk* 'grudge, rancour' < \*kit- / \*ket-. (1329)

*daro:* 'yesterday' < \*ne:t-. (3109)

*pir* 'rain' < \*pit-. (3610)

*ma:r* 'son, boy' < \*mati. (3901)

*bi:ra* 'simply, just' < \*vet-. (4538)

*trujj-* 'to choke' < \*tu:t-. (2770)

*ba:rr-*, *ba:rring-* 'to become dry, whither'; *ba:rif-* 'to make dry', *ba:run* 'dry, ripe, barren' < \*va:t-. (4355a)

(b) Br. rr < \*t (four certain instances and one uncertain item (given at the end)).

*arrif-* 'to ask' < \*(y)at-i (26); semantically this Brahui word goes better with Te. *adugu* 'to ask' (71) rather than with \*(y)ati 'to know'; there are other instances for Br. r < \*-t).

*arr-* 'to tear' < \*at-u. (266)

*birr* 'wild, shy', *birri:* 'wildness' < \*vet-. (4536)

*birr-* 'to separate out, select', *birve* 'seive'; *birving-* 'to be sifted' < \*ve:t- / veI-V-. (4564)

*Gurr-* 'to growl', *gu:rr-* 'to gurgle (of camels), groan loudly' < \*gut-. (1538)

25.1.12. Krishnamurti (1961: 37, 45-46) on the basis of a small number of examples, talks about alternation of \**t* with \**f* and *s* and says that in such cases the alveolar is original. The examples he gave for these alternations were rightly kept separate in different entries in the DED(S). \*va:*t*- 'to wither, dry up' (4377) and \*va:*f*-V- 'to dry up' (4355a) which, in Krishnamurti's opinion show \**t* / \**f* alternation could be from the original root \*va:- / va- with the derivatives *t* and *f*. Since the two sounds are kept distinct in numerous etymologies, the assumption of genetic connection between them in this particular case can not be beyond suspicion. Same is the case with \*ka:*t*- / \*ka:*f*-i 'to bite' (Ta. *katி*, etc., 945), \*ka:*f*-V- 'to bite' (Te. *karacu*, etc., 1170) and \*kacc- 'to bite' (Ta. *kaccu*, Ka. *kaccu*, *karcu*, etc., 920) which, according to Krishnamurti, show an alternation of \**t*, \**f* and \*c; the ultimate root here is probably \*ka- the consonants that follow it being derivatives (note that \*kacc- could be from \*ka:*f*-Vc-). Krishnamurti's view (1961:37) that in cases like Te. *a:du* 'to play'; [tr. *a:r-cu* (see 24.3.2.) *d* in Telugu and other languages is from \**f* is unacceptable because there are numerous cases in which \**f* has not changed to *d*, e.g. Ta. Ma. |Ka.Te. *ma:ru* 'to change'; *nu:ru* 'to grind'; *nu:ru* 'hundred' etc. Zvelebil (1970: 98, 102) follows Krishnamurti in talking about these so called "alternations".

## 25.2. \*-*ff*- (or \*-*rr*-).

25.2.1. \*-*ff*-: Ta. -*rr*- (spoken -*tt*<sup>-1</sup> but -*fr*- in reading the written form). Ma. -*rr*- Ko. To. -*f*- Ka. Kod. Tu.

<sup>1</sup>. Inscriptional evidence for \**ff* > Ta. *tt* is available from the 8th century onwards, e.g. *elunu:ttu* for *elunu:rru*, oblique of *elunu:ru* '700'

-tt-, -t-.<sup>2</sup> Te. -*ʈʈ-*, -*t̪-*. Kol. Nk. Nk. (Ch.). -*tt-*, -*t-*. Pa. -*tt-*, -*t*, (NE) -*ʈʈ-*, -*t̪-*. Ga. -*ʈʈ-*, -*t̪-*. Go. -*tt-*, -*t-*. Konḍa -*R-* (voiceless trill). Pe. Mand. -*cc-*, -*c-*. Kui -*s-*. Kuwi -*cc-*, -*c-*. Kur. Malt. -*tt-*, -*t-*. Br. (? -*t-*; perhaps 3089 Br. *nut* 'flour' < \**nuʈʈ-*) (In the languages beginning with Kannada, CC after a short vowel and C after a long vowel; Konḍa and Kui do not have CC.)

Examples:

1067. Ta. Ma. *ti:ʈʈu* 'to feed'. Kod. *ti:t̪-*. Pa. *tittip*. Go. (A) *tih-*. Pe. *ti:c-*. Kui *ti:s-*. Kuwi (F) *ti:ss-*; (Su.) *ti:h-* (*ti:st-*). (< \**ti:ʈʈ-*; tr. of \**tin̪-* (see example 1072), 2670a)

1068. Ta. Ma. *to:ʈʈu* 'to cause to appear, show'. To. *twi:f-* 'to be foreseen'. Kol. Nk. Nk (Ch.) *to:t-* (negative verb) 'to be not'. Pa. (NE) *to:tip-* 'to show'. Ga. (Oll.) *to:t̪-*. Go. (A) *toh-*. Konḍa *to:R-*. Pe. *co:c-* / *to:c-* Mond. *tu:c-*. Kuwi (F) *to:ss-*, (Su.) *to:h-* (*to:st-*) (< \**to:ʈʈ-*; tr. of \**to:yf-* (see example 1073), 2942).

1069. Ta<sub>2</sub> *purṭu*, *purṭam* 'white anthill'. Ma. *purṭu*. To. *wi-xuḍy* (< Badaga; *kudy* 'pit'). Ka. *puttu*, *putta*, *hutta*, *huttu*. *utta*. Kod. *putṭi*. Tu. *puñca*. Te. *puṭṭa*. Kol (Kin.) Nk. *putṭa*. Pa. *putkal*, (NE) *puṭkal*; *putta*, (NE) *puṭṭa* 'nest inside anthill'. Ga. (Oll.) *puṭkal* 'white anthill' Go. *putti*. Konḍa *puRi*. Pe. *puci*. Kui *pusi*, (K) *pucci*. Kuwi (Su. P.) *pucci*. Kur. *putta*. Malt. *pute*. (3556)

1070. Ta. Ma. *ma:ʈʈam* 'change, word of challenge, reply, word'. Ko. *ma:f-a:v* 'white clothes'. To. *mo:f* of beautiful clothes, beauty'. Ka. *ma:tu masta*, 'word'. Te. *ma:ṭṭa*; *ma:ṭu* 'a time, repetition' (< \**ma:ʈʈ-*; verbal noun of \**ma:f-* 'to exchange'; 3960.)

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<sup>2</sup>. In the oblique base of the neut. pl. pronoun Ka. -*ʈ-* corresponds to Ta. Ma. -*ʈʈ-*, e.g. *avu* (*av-aʈ-*), cf. Ta. *avai* (*av-aʈʈ-*). This, then, is the correspondence after V<sub>2</sub>.

See also examples 144 (transitive), 337 (oblique base), 467 (transitive and verbal noun), 623 (\**vaff-*), 941 and 1064 (oblique base).

**25.3.** \*-*ŋf-* (or \*-*ŋt-*).

25.3.1. \*-*ŋf-*: Ta. -*ŋt-* (spoken *ŋŋ-*, *-nn-*). Ma. -*nn-* (dental). Ko. -*d-*, -*nd-* (-j < \**ŋti*). To. -*d-*. Ka.  $\overline{V}$ ] -*r-*  $\overline{V}_1$ ] -*nd-*. Ko $\ddot{d}$ . -*nd-*. Tu. -*nd-*, -*ŋj-[i]*. (the nasal is dropped after a  $\overline{V}$ ). Te. -*ŋd-*, -*nd-*. Kol. Nk. Nk (Ch.) -*nd-*. Pa. -*nd-*, (NE) -*ŋd-*. Ga. -*nd-*. Go.  $\overline{V}$ ] -*nd-* / -*ŋd-*,  $\overline{V}$ ] -*dd-*. Konda  $\overline{V}$ ] *nŋ-*,  $\overline{V}$ ] -*r-*<sup>3</sup>. Pe. Mand. -*nj-*. Kui Kuwi -*nj-*, -*j-*. Kur. Malt. -*nd-*. Br. -*s-*.

Examples:

1071. Ta. *enŋtu* 'sun'. Te. *enŋda* 'sunshine'; *enŋdu* 'to be heated or dried by exposure to the sun'. Pa. *nendi*, (NE) *nendī* 'heat of the sun' Nk. (Ch.) *edde*. Go. *addi*: (A) *eddi*: (738)

1072. Ta. *tin* (*tinŋt-*) 'to eat'. Ma. *tin(nu)*. Ko. *tin*- (*tiŋt-*) To. *tin*- (*tiŋt-*). Ka. *tin(nu)* (*tind-*). Ko $\ddot{d}$ . *tin*- (*tind-*). Tu. *tin*- (*tind-*). Te. *tinu* (*tinŋt-*) Ko!. Nk. Nk. (Ch.). Pa. *tin*- (*tind-*). Ga. *tin*- (*tind-*). Go. *tin*- (*titt-*). Konda *tin*- (*tiR-*) Pe. *tin*- (*tic-/ cic-*). Mand. *tin*- (*tic-*). Kui. *tin*- (*tis-*) Kuwi (Su. P.) *tin*- (*ticc-/ picc-*). (2670a).

1073. Ta. *to:ŋtu* 'to be visible, come to mind'. Ma. *to:nnu*. Ko. *totr-*. To. *twi:ŋt-*. Ka. *to:t* (*to:ŋd-*), *to:tu* (*to:ŋi-*) Tu.

<sup>3</sup>. See example 1073 for the loss of the nasal after a long vowel; *va:nŋtu* (< \**avanŋtu*) 'he' retains the nasal probably because it was originally after a short vowel. But *mu:ŋri* 'three' given by Krishnamurti (1969:399) makes this conditioning uncertain,

*to:ju-*, *so:ju-*, *ho:ju-*. Te. *tō:cu*. Pa. *to:nd-*. Ga. (Oll.) *to:ṇd-*.  
 Konda. *to:r-*, Pe *co:nj-* / *to:nj-*. Mand. *hu:nj-*. Kui *to:nj-*.  
 Kuwi (Su.) *co:nj-*, *to:nj-*. (2942).

See also examples 28, 29, 248 (past stem), 340, 503, 1079, 1080 and 1097.

25.3.2. In Malayalam both *\*-yf-* and *\*-nt-* change to dental *-nn-* (note that *DED* (pp. xii-xiii) is wrong in giving the correspondence Ma. *ṇṇ* for *\*ṇṛ*). The evidence for this change occurs for the first time in the inscriptions of the 11th century, e.g. *cenna* < *\*cenṛa*, past adjective of *cel* 'to go' (so Ramaswami Aiyar 1937-39 (vol. 6) :8-9). However, in the literary texts of the 14th century and occasionally in the inscriptions after the 11th century, *ṇṛ* occurs but this may be due to the retention of the earlier writing practice. Since in the rock inscriptions of the 10th and the 11th centuries, which show assimilation of the post-nasal plosive in the case of the velar, palatal and dental plosives, there are no instances of *\*ṇṛ* > *nn*, Ramaswami Aiyar (*loc. cit.*) thinks that the latter change might have become fully established at a later stage. A.C. Sekhar (1953:27) surmised that because both *\*ṇṛ* and *\*nt* yield dental *nn*, *\*ṇṛ* must have first merged with *\*nt*. It is important to note that there are no exceptions to the change *\*ṇṛ* > *nn* unlike in the case of other clusters of nasal and homorganic plosive.

The genitive case marker after *n* is *-ṛ* as in *enṛe* (phonetically *enṛde*) 'my', *marattinṛe* (*marattinde*) 'of the tree' (it is a variant of *-ute*). It appears from the 14th century. Since it is not affected by assimilation, it must have cropped up after the completion of the concerned assimilatory change.

25.3.3. In Kota, elision of the nasal in *\*ṇṛ* seems to be the rule after a short vowel; the only exceptions are *mand* in example 29, and *nind-* past stem of *nil-* / *nin-* 'to stand

(3043); but, after a long vowel it is commonly retained: see example 340 and the secondary stems *na:nɖ-*, *i:nɖ-*, *ku:nɖ-* of *na:n-* 'to become wet' (3006), *i:n-* 'to bear young' (473) and *ku:n-* 'to be in a bowed position' (1605) (see Emeneau 1967a: 406 for some more examples). In three verbs given by Emeneau there, *n* is lost in the secondary stem even after a long vowel; they are *a:n-* (*a:ɖ-*) '(mouth) opens, open (mouth)' *bu:n-* (*bu:ɖ-*) 'fail because forestalled' and *bu:n-/bu:v-* (*bu:ɖ-*) 'hair becomes white'. The cognates for the last two are not known but *a:n-* (*a:ɖ-*), for which Emeneau did not give any etymology, can be put in DED 9, cf. Ta. *akal* (*akanʈ-*) 'to spread, widen, extend', *a:ɳʈa* (< \**akayʈa*) 'wide'. If the loss of *n* here is because of its occurrence in the second syllable originally, it will not be an exception. We may get clarification on this matter if the etymologies of the other two verbs are known.

The *ɖ* in Ko. *eyɖ* 'two', which corresponds to \**ṇṭ-* (example 206) has been explained by Emeneau (1957:2) as due to the analogy of *oɖ* 'one' and *mu:nɖ* 'three'.

**25.3.4. In Telugu** \*-*ṇṭ-* has the two reflexes *-ṇḍ-* and *-nd-* and there seems to be no possibility of giving any phonological conditioning for these two (see Kandappa Chetty 1969). Since, in this language, \**ʈʈ* regularly merges with the retroflex, we can consider *-ṇḍ-*, as the regular reflex for \**ṇṭ-* and, in fact, it occurs in a greater number of cases than *-nd-*. For additional examples of *-ṇḍ-*, see DED 650, 1548, 2481, 2641, 2670 (Te. *tiṇḍi* 'eating, food' < \**tinʈi*), 3049 (Te. *nindu* 'to be filled' < \**ninʈi*) and the masculine pronouns, e.g. *vā:ɖu* 'he' < \**avanʈi*. *-nd-* occurs in a relatively small number of cases: *u:du* 'to lean upon' (< \**u:ṇṭi*-, 650), *kandu* 'to be scorched, inflamed (as by a blow)' (< \**kanʈi*- 1186),

*kandu* 'infant' (< \**kanṭi-*, example 1079), *kundu* 'to decrease, droop' (< \**kunṭi-*) 1537) and *pandi* (< \**panṭi* example 28).<sup>4</sup>

The explanation of dialect mixture in this case is not supported by any evidence and therefore it must be viewed with suspicion.

In inscriptions *nt* in *va:n̥tu* 'he' was retained upto the 9th century; *va:n̥du* with *nd* for *nt* appears for the first time in the Addanki inscription of 848 A.D. (so Mahadeva Sastri 1969: 42).

In the formation of the past tense in Old Telugu, verbs of the type (C) <sup>V</sup>*nu* have *-ti-* as the allomorph for the past tense marker (in the 1st and the 2nd persons), e.g. *anu* (*an-ṭi-*) 'to say' (737) *vinu* (*viṇ-ṭi-*) 'to hear' (4472), *tinu* (*tiṇ-ṭi-*) 'to eat' (2670), *manu* (*maṇ-ṭi-*) 'to live' (3914) and *konu* (*koṇ-ṭi-*) 'to buy, take' (1788), etc. *konu* is from \**koṇ-* but in the others given above the *n* is from the alveolar \**n̥*. Emeneau (1967a:388) equates the *-n̥t-* in these verbs with South Dravidian *nt* (or *ṇt*) as, for example, in *tiṇ* (*tiṇt-*) 'to eat' and *koḷ* (*koṇt-*) 'to take' etc. and explains the presence of *t* rather than the expected *d* in the Telugu forms as due to

4. Te. *n̥dr* for \**n̥t* occurs in a very few cases (see Kandappa Chetty 1969: 224). Of these, *ka:n̥dru*, *ka:n̥drincu* 'to make violent sound for bringing up phlegm' (:Ta. *ka:n̥tal* 'vomiting, 1185) may have the *r* due to onomatopoeia. *mandra:ṭamu* 'botheration' may be a loan from Ta. *manṭra:ṭam*. *tanḍri*, (inscr.) *tanṭi* 'father' is a special case (2494). In this, Ta. *tantai*, Ma. *tanta* and Ka. *tande* are from \**tantay* (<*tam+tay*; see Emeneau 1953b:350-351) whereas Te. *tanḍri*, Pa. *tend*. Kui Kuwi *tanji*, Konda *tanṭi* are from \**tanṭay* (< \**tan+tay*). The former reconstructed form uses the reflexive pl. pronoun while the latter uses the reflexive sg. form, which, however, is very rarely used in such constructions. Note that Pa. *tend* could only be from \**tanṭi-* (because Pa. *e* < \**a* only before an alveolar) but not from \**tant-* (contra Emeneau 1953b:351).

"analogy with the voiceless (but dental) in [the past suffix -it- in the 1st and 2nd personal past forms of all other Telugu verbs".

The problem does not appear to be so simple and the evidence merits fresh thinking. Since the *t* in -it-, which is the past marker in the majority of the Telugu verbs as in *cepp-it-* of *ceppu* 'to tell', can only be from double \**tt* (not \**t*), it is plausible to assume that in the verbs of the (C) *Vnu* type also, the suffix was originally \**tt* (in spite of the fact that it was \**t* in South Dravidian). \**n* / \**n*+\**tt*->\**ntt* / \**ntt* > Te. *nt* (note that \*NPP yields NP in Telugu, see Chapter 21). It is possible to assume that the sequences \**ntt*, and \**ntt* in the past stems of the verbs go back to the Proto-Telugu-Kuwi stage. After the separation of Telugu from this group, the nasal in these sequences has been lost in the Proto-Gondi-Kuwi stage as evidenced by the corresponding past stems in the languages derived from this stage (see the following section). Since there is strong evidence even otherwise to connect Telugu with the Gondi-Kuwi group, there is nothing wrong in assuming that the past stems of the concerned verbs in Telugu and Gondi-Kuwi are derived from one and the same source. This, then, is one more piece of evidence for the setting up of the Telugu-Kuwi subgroup (see P.S. Subrahmanyam 1971: 523). In fact, *t*<\**tt* is the most common suffix in all the languages of this subgroup.

25.3.5. A comparison of the past stems of some of the verbs ending in *n/n/l* in Gondi-Kuwi makes it clear that the correspondences in them are not derivable from \**nt*/\**nt*. For example, \**panti* 'pig' becomes Go. *paddi*:, Kui *paji* but the past stems of *in* 'to say' are Go. *itt-*, Kui *is-*, and which should be Go. *idd-* and Kui *ij-* if they were derived from \**nt*, as

is usually supposed. They should be from Proto-Gondi-Kuwi \**iʃʃi*-: if we compare this with Te. *an-ti-* we can trace it back further to Proto-Telugu-Kuwi \*(y)*anʃʃi*-.

The past stems of the following verbs in the Telugu-Kuwi group may be noted.

\**tin*- (Proto- Te. -Kuwi past stem \**tin-ʃʃi*-, see example 1072).

\**un*- (Proto- Go. -Kuwi past stem \**utʃʃi*- possibly < \**un-ʃʃi*-, see example 254).

1074. Te. *anu* (*anti*) 'to say'. Go. *in-* (*itt*-). Konḍa *in-* (*iR*-). Pe. Mand. *in-* (*ic*-). Kui. *in-* (*is*-). Kuwi (Su.) *in-* (*icc*-) < Proto Te. - Kuwi \*(y)*an*- (\*y)*anʃʃi*-); cf. SDr. \**en*- (\**enʃʃi*-) and Pa. *en-* (*ett*-), Kol. *en-* (*ent*-); (737).

1075. Te. *canu* (*anti*) 'to go'. Go. (A) *son-* (*sott*-). Konḍa *son-* / *sol-* (*soR*-). Pe. Mand. *hal-* (*hac*-). Kui *sal-*. (*sas*-). Kuwi (Su.) *hal-* (*hacc*-) < Proto, Te.-Kuwi \**cal-* / \**can-* (\**canʃʃi*-); cf. SDr. \**cal-* (\**canʃʃi*-), Pa. *cen-* (*cend*-) and Ga. (Oll.) *sen-* (*send*-), Kol. *ser-* (*sedd*-). (2286).

1076. Go. (A) *pun-* (*putt*-) 'to know'. Pe. Mand. *pun-* (*puc*-). Kui *pun-* (*pus*-). Kuwi (Su.) *pun-* (*pucc*-) < Proto Go. -Kuwi \**pun*- (\**putʃʃi*-) possibly < Proto Te. -Kuwi \**pun*- (\**punʃʃi*-); cf. Pa. *pun-* (*putt*-); (3563a).

1077. Te. *manu* (*mani*-) 'to live', Go. *man-* (*matt*-) 'to be', Konḍa *man-* (*maR*-). Pe. Mand. *man-* (*mac*-). Kui. *man-* (*mas*-). Kuwi (Su.) *man-* (*macc*-) < Proto Te. -Kuwi \**man*- (\**manʃʃi*-); cf. Pa. *men-* (*mett*-), Ga. (Oll.) *man-* (*mat*-). (3914)

1078. Te. *vinu* (*viŋti*-) 'to hear'. Konḍa. *ven-* (*veR*-) 'to ask' Pe, Mand. *ven-* (*vec*-) 'to hear'. Kui. *ven-* (*ves*-) 'to hear, ask' Kuwi (Su) *ven-* (*vec*-) 'to hear' < Proto-. Te. -Kuwi \**ven*- (\**venʃʃi*-); cf. Pa. *ven-* (*vett*-) 'to hear'; Ga. (Oll.) *ven-* (*vet*-), Kol. *vin-* (*vint*-). Kur.- Malt. *men-* 'to hear, ask'. (4472).

In Parji (and Gadba) *ven-* 'to hear', *pum-* 'to know', *men-* 'to be' and *en-* 'to say' have past stems with *-tt-* and without the *n* but *cen-* 'to go', *tin-* 'to eat' and *un-* 'to drink' retain the nasal in the past stem and have the past marker *-d-* (*-d-* after *un-*) (see Burrow and Bhattacharya 1953:53). The reason for this divergence is not clear. A similar difference is found in Kolami (and Naiki (Ch.)) also. *en-* (*ent-*) 'to say' and *vin-* (*vint-*) 'to hear' have the *-t-* suffix while *tin-* (*tind-*) 'to eat'; *un* (*und-*) 'to drink' and *ser-* (*sedd-*) 'to go' have the *-d-* suffix (the nasal is retained in both the types, see Emeneau 1955: 83, 90, 91). In South Dravidian, these verbs do not show any difference in the formation of the past tense, for example, Ta. *en* (*enṛ-*) 'to say', *tin* (*tinṛ-*) 'to eat'. The same is the case with Telugu also. Does the Kolami-Parji evidence indicate that there was originally strong and weak verb distinction even in verbs ending in *y* or *I*? In any case, the Parji-Gadba development (i.e. the loss of the nasal in the past stem) in the first four verbs mentioned above may not be genetically connected with the similar development in Gondi-Kuwi since it is not found in Kolami. However, if the \**tt* in these verbs is a Proto-Central Dravidian or even Proto Dravidian feature, the presence of it in Telugu-Kuwi will not be a shared innovation in that subgroup. Even then, the presence of \**tt* in \**tin-*, and \**cal-*/ \**cap-* in Telugu-Kuwi can be considered as a shared innovation in that subgroup.

25.3.6. In Gondi \**nt* after a short vowel normally loses the nasal and changes to *dd*; but cf. *undi*: < \**onṛt-* (example 503); after a long vowel it changes to *nd* in the western (Adilabad, Yeotmal) and northern (Betul, Chhindwara, Mandla, etc.) dialects but to *nd* in the south-eastern (Muria, Maria and Sironcha) dialects (see examples 340 and 503; cf. Burrow and Bhattacharya 1960:77). Note that the Adilabad dialect

has *mu:nd* 'three' < \**mu:n̥f*- 'but *ne:nd* 'today' (\**ñna:n̥f*-; example 1097) and *ne:nd*- '(plant) to take root' (< \**ñna:n̥f*-; 2380).

25.3.7. In Kui and Kuwi *-nj-* < \**n̥f* is more common but there are also cases of *-j(j)-* < \**n̥f*, e.g. Kui-Kuwi *nenj-* 'to become full' < \**nep̥t*-/\**ninf̥t*- (3049), Kui *ne:nju* 'today' Kuwi *ni:nju* < \**ñna:n̥f*- (examples 1097); Kui *vaj-* 'to cook', Kuwi *vajj-* < \**vap̥t*- (cf. Pa. *vend-*, 4364 and Kui-Kuwi *a:ji* 'hail' < \**a:n̥fi*, cf. Konḍa *a:n̥ga* (348). (see Burrow and Bhattacharya 1963:242)

25.3.8. The change of the original alveolar stop (in doubling and in the cluster, nasal + homorganic stop) into the palatal affricate characterizes the Pengo-Manda-Kui-Kuwi subgroup. The proto language of these four must have undergone this change after its separation first from Gondi and then from Konḍa; for details, see P.S. Subrahmanyam 1971:525). The single \**f* also changed to palatal *j* in Kui but in the other three languages, it developed into *z/s* (Pengo) and *y* (Manda, Kuwi). Kuwi additionally shows *-r-* and *-?-.* This diversity indicates that the change in the non-geminate took place in this group at a very recent stage. Burrow and Bhattacharya (1961:122) think that since in Kui *y > j* is regular, \**f* first changed to *y* in Kui, as in Kuwi, and then it changed to *j*.

25.3.9. In a few cases, the nasal in \**n̥f* seems to have been lost very early, i.e. at the Proto Dravidian stage itself so that we have forms that look to both \**n̥f* as well as \**f* in the daughter languages. The following cases are noteworthy.  
 1079. Ta. *kañtu* 'calf, colt, young of various animals' sapling'; *katt-a*: 'cow with a young calf'. Ma. *kannu* (obl. *kañtu-*) 'young of cattle, young plantain tree'. To. *kot* 'female buffalo calf below one year'. Ka. *kañu*, *kara*, *kañvuu* 'calf'; *kanda* 'young child'; *kandu* 'calf, young plantain tree'. Tu. *kañji* 'calf'. Te. *kandu* 'infant'; *kanu* 'to bear or bring

forth'. Pa. *kar* 'sapling'. Ga. (S) *karr-* 'to yean'; Go. (G) *marka karre* 'mango sapling'. Kur. *xadd* 'child, young animal or plant'; *xaddas* 'son, boy', *xada*: small child, young of animal, small'. Malt. *qade* 'son'. Br. *xan* 'to give birth to'. (1187)

1080. Ta. *nirai* 'to become full'. Ma. *niray-*. Ko. *nerv-* '(girl) reaches puberty'. To. *ner-* 'to become full'; Ka. *nege*. Kod. *nere-* 'to attain puberty'. Tu. *neri-*, *nerevu-* 'to become full'. Te. *negayu*, *nerayu*. (< \**niʃay-*);

Te. *nindu*, Kol. Nk. *nind-*; Nk (Ch.) *in-*. Go. *nind-*, Konda *nint-* (also *nir-*). Pe. Kui Kuwi *nenj-*. Kur. *ni:nd-*, *nindr-*. Malt. *nindGr-* (< \**niŋt-*; 3049 Gondi-Kuwi also have the corresponding transitives from \**niʃt-/neʃt-*; Go. *nih-*. Konda. *niR-*. Pe *nec*. Mand. Kuwi *neh-*).

\*t

### 26.1. \*t-.

26.1.1. It irregularly changes to *d*- in some cases in languages other than Tamil-Malayalam and Toda. In some non-Brahmin dialects of Tuṇu, it changes to *c*- which further becomes *s*-, *h*- or  $\phi$  (see 23.1.2) in some of them.

In Pengo and Kuwi \**t*- is palatalized dialectally when the consonant in the following syllable is a palatal (*c* or *j*) (see Burrow and Bhattacharya 1970:9-10; 1963:233):

Pe. *cic-/tic-*, past stem of *tin-* 'to eat',

*cinjen/tinjen*, infinitive of the same verb (example 1072)  
*co:nj- / to:nj-* 'to appear', *cotc- / to:c-* 'to show'.

(examples 1073 and 1068)

Kuwi (Su.) *co:nj- / to:nj-* 'to appear' (example 1073)

*jucc- / (P) ducc-* 'to carry on the head' (:Go.  
*to:c-*. Pe. *jo:c-*; 2918)

Mand. *hu:nj-* in example 1073 indicates that Manda also has a similar change, i.e., \**t*- > \**c*- > *h*-.

26.1.2. \**t*- changing to retroflex *t*- (or *d*-) before a retroflex is common in many central languages other than Telugu (see

Burrow and Bhattacharya 1963:240). Kurux-Malto also show such a phenomenon.

Kui *tu:nū* 'a log of wood' (:Ta. *tu:n* 'post'. 2780).

*tađi* 'mother, woman' (:Ta. *tałlai*, Te. *talli*, example 1168)

*do:ndi* 'pumpkin' (:Ka. *tonde*, *donde*. Te. *donda* 'the gourd, *Momordica monadelpha*'; 2880)

*to:da* 'lip' (:Ta. *tuđi*; 2998)

Kuwi *tałti*, *tałto* 'honeycomb' (:Tu. *tałti*; 2874)

*tuñ-*, *tu?-* 'to cut' (:Ta. *tuni*; 2707)

*todi* 'chin' (:Ta. *tutı* 'lip'; 2698)

*to:ta* 'garden' (:Te. *tō:ta*; 2927)

Pengo. *to:ta* 'mango grove' (:Te. *tō:ta*; 2927)

Manda *tu:t-* 'to sprinkle' (:Pe. *tu:t-* 'to winnow', Ta, Ma. *tu:rru*; 2798)

Konđa *to:n̥ta* 'garden, grove' (Te. *tō:ta*; 2927)

*duđu* 'stout stick' (:Te. *duđdu*; 2706)

*tondo* 'chameleon' (Te. *tonda*; 2882)

Gonđi (A) *toddī*: 'mouth', (Tr.) *toddī*: :Ta. (*tuđi* 'lip'; 2598)

Kolami (A) *tuñto:r* (W). *tiłor* 'scorpion'. (2409)

Naikri *tiłor* 'scorpion' (:Kol (W) *tiłor*; 2409)

Parji *do:ra* 'big, stout' (:Ka. *doddā*; 2875)

*tunda* 'creeper' (Te. *donda*; 2880)

Gadba *tełp-* 'to raise, lift' (:Pa. *tetip-*, 2840)

Kuřux *donda: potta:* 'large-bellied' (:Ka. *doddā*; 2875).

*tañd-* 'to prevent' (:Ta. *tañu*; 2460)

*ta:t-* 'to lick, kiss' (2408)

Malt, *dudo* 'large bellied' (:Kh. *doddā*; 2875)

*ta:t-* 'to lick'. (2408)

See also examples 13, 17, 249, 466, 467, 923, 924, 1067, 1068, 1072, 1073 and several others.

### 26.2. \*-t-

26.2.1 \*-t-: Ta, Ma. -t- [d]. To. -θ-; -d- in all the other languages. Kur. Malt. also. -th- (Mahapatra (1979:27-28) points out that *th* in Malto stands for a voiced (not voiceless) dental fricative [θ]; according to him (*ibid*, pp. 207-208), in the Kumarbhag dialect, it changes to *y* medially but is lost in the final position. Note that in many Gondi dialects, a consonant (except *r*, *h*, and *s*) occurs normally double after a short vowel).

In the Tamil-Toda group, dentals are palatalized after *i* or *y* (see 26.5.1. for details)

Emeneau (1975: 21) has noted that Kui-Kuwi lost the initial *d* of the personal object suffix after verbs of the 1st and the 3rd conjugations: Kui *si:-a-*, Kuwi *hi:y-a*, both < \**si:d-a-*, cf. Pe. *hi:-da-*.

1081. Ta. *pitunku* 'to protrude, gush out'; *pitukku* 'to press out'. Ma. *pitunnu* 'to be pressed out', tr. *pitukku*. To. *pīθx-* 'to be squeezed'; tr. *pīθk-*. Ka. *hiduku* 'to squeeze'. Te. *pituku*, *piduku* 'to milk'. Kol (Kin). *pidk-* 'to press'. Go. *piduk-* 'to exert one self violently in vain (as in lifting a burden)'. Kur. *pedex-* 'to pinch, squeeze'. Malt. *pethG-* 'to break open (as a large fruit)'; *pethGr-* 'to burst or break (as a fruit)'. (3426).

1082. Ta. *mital* 'brain'. Ko. *medl.* To. *mōθs* cheek'. Ka. *miduł*. *meduł*, *medađu* (< Te.) 'brain' Te. *medađu*, Kol. *mitik*, (Kin) *mitk*. Nk. *mitik*. Pa. *medek*. Ga. (P.) *medik*. Go. *maddur*, (A) *meddu:r*. Kur. *meddo:*, Malt. *medo*. 4153).

See also examples 255, 346 and 624.

**26.3. \*-tt-.**

26.3.1. \*-tt-: Ta. Ma. -tt-. Ko. To. Malt. Br. -t-. In others  $\bar{V}_1$  -t-;  $\bar{V}_2$  -tt-.

See examples 257, 351 and 624.

For palatalization after *i* or *y* in Tamil-Toda, see 26.5.1.

**26.4. \*-nt-.**

26.4.1. \*-nt-: Ta. -nt-. Ma. -nn- (dental). Ko. -d-. To.  $\bar{V}_1$  -d-; (elsewhere) -θ-. Ka.  $\bar{V}_1$  -nd-; (elsewhere) -d-. Ko<sup>d</sup>. Te. Kur. Malt. -nd-. Pa. Ga.  $V_1$  -nd-;  $V_2$  -d-. Br. (noknow). In others probably -nd- at least after  $V_1$ .

For palatalization after *i* or *y* in Tamil-Toda, see 26.5.1.

Examples:

1083. Ta. *ku:ntal* 'long flowing tresses of a woman'. Ma. *ku:ntal*. Ka. *ku:dal* 'hair (of the head or body)' (1572).

1084. Ta. *maruntu* (in cpds. *maruttu*) 'medicine'; *maruttan* 'physician'. Ma. *marunnu* 'medicine'; *maruttan* 'doctor'. Ko. *mad* 'medicine'. To. *mad*. Ka. *mardu*, *maddu*. Ko<sup>d</sup>. *maddi* < Ka.). Tu. *mardi*. Te. *mandu*. Kol. (SR). Nk. Nk. (Ch.) *mand*. Pa. *merud*. Ga. (Oll.) *mardil*, (S) *marid*. Go. *mat(tu)*. Kur. *mandar*. Malt. *mandru*. (3863)

1085. Ta. *viruntu* 'feast, guest'. Ma. *virunnu*. Ko. *vid a:l* 'man visiting from another village, esp. for festival'; fem. *vida:c*. Ka. *birdu*, *biddu* 'banquet, meal', *birdana*, *biddana* 'invitation to dinner'. Tu. *binne(ri)* 'relative, guest'. Te. *vindu* 'feast, guest'; *vinta* 'strangeness'. Go. *warto:l*, (A) *verta:l* 'guest'. Kui. *breenju* 'stranger,. (4442)

See also the past stem in example 30.

26.4.2. Evidence for the Malayalam change \*nt > nn occurs in inscriptions from the 10th century onwards. However,

Kumaraswami Raja (1980b) observes that the assimilation in \*nt is very rare when it is immediately preceded by a vowel of the initial syllable ( $V_1$ ) short or long; in other positions assimilation occurs in some but not in all, e.g. *uluntu* 'blackgram' (:Ta. *uluntu*, 594); *cilanni* 'spider' (:Ta. *cilanti*, 2110) but *pantu* 'ball' (3241), *entu* 'what' (4228), *pontu* 'to increase' (3696), *ni:ntu* 'to swim' (3004), *ma:ntu* 'to scratch' (3944), *paruntu* 'kite' (3281), *eruntu* 'shell fish in rivers' (7623). The past suffix \*-nt- commonly changes to -mn- in whatever position it is, with the exception of the two verbs *no:* (*no-nt-*) 'to pain' (3143) and *ve:* (*ve-nt-*) 'to be boiled' (4540) but *varu* (*va-nn-*) 'to come' (example 30), *taru* (*ta-nn-*) 'to give to 1st or 2nd person' (2526), *naṭa* (*naṭa-nn-*) 'to walk' (2957), etc. (see 22.5).

26.4.3. In Kota, the past suffix \*-nt- regularly changes to -d- with the loss of the nasal, e.g. *va:r-* (*va-d-*) 'to come' (example 30), *av-* (*av-d-*) 'to dig' (:Ta. *akal* (*akal-nt-*), 12). Therefore, we can take -d- to be the native development. There are, however, a few words with *nd* but these can be considered as loans, for example, *tondarv* 'trouble' (< Ta. *tontaravu*; 2887), *pandi:gm* 'race, contest' (< Ta. *pantayam*; 3239), *ond* 'to be united' (< Ka. *ondu*; note Ko. *nd* for \**ŋt*, 834d).

26.4.4. In Toda, \*-nt->-d- immediately after a vowel of the first syllable (chiefly short vowels, but also *mi:d-* (< \**mi:-nt-*), past stem of *mi:-* 'to bathe', but > -θ- (intra-vocally, this has a voiced allophone) elsewhere (Emeneau 1967a:383). This is best illustrated by the secondary stems of Toda, which were past stems in origin, e.g. *po-d-* < \**va-nt-*, past stem of *varu* 'to come' (example 30), *pō-d-* < \**ve-nt-*, past stem of *ve:* 'to be hot' (4540) but *nar-θ-* < \**naṭa-nt-*, past stem of \**naṭa* 'to walk' (2957) and *iθ* < \**iru-nt-*, past stem of *iru* 'to be' (407).

26. 4.5. In Kannada, the nasal is retained in \*nt only immediately after the short vowel of an initial syllable; otherwise it is lost (Emeneau 1967a: 382-383) e.g. *ba-nd-*, *ta-nd-*, *no-nd-*, *mi-nd-*, past stems of *bar-* 'to come', *tar-* 'to bring', *no:-* 'to pain' and *mi:-* 'to bathe' respectively, but *ir-d-* (< \**iru-nt-*) past stem of *iru* 'to be', *suy-d-* (< \**cuy-nt-*) past stem of *suy* 'to breathe', *so:r-d-* (< \**co:r-nt-*) past stem of *so:r-* 'to leak', *naḍa-d-* (< \**naṭa-nt-*) past stem of *naḍe-* 'to walk'.

26. 4.6. Kodagu, unlike Kannada, retains the nasal in all positions (see the list of verbs with past stems given in Emeneau 1967a: 410-411). A few examples are *taḍe-* (*taḍa-nd-*) 'to be obstructed', *ku:-* (*ku:-nd-*) 'to crow', *naḍa-* (*naḍa-nd-*) 'to walk', *tora-* (*tora-nd-*) 'to open'. Therefore, words like *maddi* 'medicine' (example 1(84) in which the nasal is lost must be loans from Kannada.

### 26. 5. Palatalization of dentals in Tamil-Toda and in Parji.

26. 5.1. Palatalization of the dental past suffixes (\*t, \*nt, and \*tt) after i or y is a shared innovation in the Tamil-Malayalam-Kodagu-Kota-Toda subgroup of South Dravidian (Emeneau 1967a; Subrahmanyam 1971: 200-201; 212). Although the standard written Tamil does not show this change, there is inscriptional and even occasional literary evidence to say that this change has already operated in Tamil at least before the 7th century.<sup>1</sup> Since the change is common to all the

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<sup>1</sup>. *va-cc-a* for literary *vai-tt-a* 'that which is put' occurs in inscriptions from the 7th century onwards; it also occurs in *Appar Te:va:ram* of the 7th century (Shanmugam 1968:83). Since the change is a shared innovation in all the languages of this subgroup, it antedates the palatalization of \*k- which is shared only by Tamil and Malayalam but not by the other languages of this subgroup. Since the latter change

languages of this subgroup, we can conclude that the change operated at the proto-stage of these languages. The change seems to have first affected \*nt and \*tt since these are palatalized in all the languages concerned. In Malayalam \*t is not palatalized, e.g. *cey* (*cey-t-*) 'to do' although it is palatalized in Kodagu-Kota-Toda. Kodagu and Kota-Toda must have extended this process to \*t at a subsequent period. In colloquial Tamil, written *cey-t-* (past stem of *cey* 'to do') is replaced by *ce-ñj-* which indicates that in such cases -t- has been analogically replaced by -ñj- < \*-nt-; cf. also *pey* (literary *pey-t-* but colloquial *pe-ñj-*) 'to rain'; note that the majority of the verbs ending in y take the nt past suffix.

One important point to be noted in this connection is that the y (of \*-ay) that occurs at the end of the second syllable does not palatalize the following dental in Kota-Toda and Kodagu while in Tamil-Malayalam there is no such restriction (this fact was not explicitly stated either by Emeneau or Subrahmanyam). This is clear from examples like the following.

- (i) Ta. *uṭai* (-nt- > *oṭañc-*) 'to be broken (as pot); tr. (-tt- > *oṭacc-*). Ma. *uṭay-* (*uṭaññ-*); (*uṭacc-*). Ko. *oṛv-* (*ord-*); (*ort-*). To. *war-* (*warθ-*); *warf-* (*wart-*). Koṭ. *ode-* (*odand-*); (*odat-*). (799)
- (ii) Ta. *kurai* (-tt- > *koracc-*) 'to bark'. Ma. *kuray-* (*kuracc-*). Ko. *kerv-* (*kert-*). To. *kwarf-* (*kwart-*). Koṭ. *kora-* (*korat-*) (1496; Ko. *kurv-* (*kurt-*) 'to snore' should be shifted to 1538)

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is attested from the beginning of the Tamil record, the former must have taken place still earlier, that is, before the beginning of the Christian era. It was not accepted into the literary language in general but \*k > c-, although it is a later one, had to be accepted because it affected the word-initial sound.

(iii). Ta. *viḷai* (-*nt*->*velañc-*) 'to grow, ripen (as grain)'; tr. (-*tt*-). Ma. *viḷay-* (*viḷaññ-*). Ko. *veḷv* (*veḷd-*); (*veḷt-*). To. *peḷ-* (*peḷθ-*); (*peḷt-*). Koḍ *bole-* (*boḷand-*). (4464)

The failure of \*-ay of the second syllable to palatalize the following dentals in Kota-Toda and Koḍagu can be explained satisfactorily only by the assumption that the palatalization of \**nt* and \**tt* was caused at the Proto-Tamil-Toda stage only by the \*y of the first syllable and the \*i of the second syllable and that the process was later extended to the \*y of the second syllable in the Proto-Tamil-Malayalam period. This hypothesis explains the given data in the simplest way. The only discomforting feature in this is the distinction made between the *y* of the first syllable and that of the second syllable, which seems to be rather arbitrary; however, differences in morphophonemic changes that depend on the syllabic position of the concerned sounds do occur in languages. We cannot think of loss of the *y* in \*-ay (of the second syllable) in Toda-Kota and Koḍagu as anterior to palatalization because (i) the latter took place at the Proto-Tamil-Toda stage, and (ii) the various vowel changes in Toda and Kota vouch for the presence of \*-ay (as different from \*-a) in the pre-stages of the two languages (\*-ay>*e* in pre-Kota). Similarly, we should rule out the possibility of the replacement of palatalized allomorphs of the past suffix by the corresponding non-palatalized allomorphs after the loss of \*-ay in Kota-Toda and after the loss of the *y* of \*-ay in Koḍagu because, if such were the case, the replacing allomorphs would not in all cases be identical with the original allomorphs (especially in cases where there is no intransitive-transitive alternation). At least, this could not have taken place identically in all the three languages. Another possibility that cannot be entirely ruled out but is highly unlikely would be this: palatalization must have spread from the first syllable to the second syllable

independently in all the five languages; since Toda-Kota does not have \*-ay and Kodagu does not have the *y* part of it, the verbs that end in \*-ay do not have palatalized allomorphs of the past suffix in these languages. This is unlikely because verbs ending in \*-i show palatalization in all the five languages and hence the palatalization in such verbs must reasonably be ascribed to the proto stage of the whole subgroup.

The following table (adopted from Emeneau 1967a:387) shows the reflexes of the three past suffixes in these languages (an arrow indicates analogical spread, a box indicates merger through phonological change).

PSDr.	Ta.	STa.	Ma.	Kod.	To.	Ko.
*-tt-	-tt-		-tt-	-t-	-t-	-t-
<i>i/y]</i>	<i>-tt-&gt;</i>	<i>-cc-</i>	<i>-cc-</i>	<i>-c-</i>	<i>-c-</i>	<i>-c-</i>
*-t-	-t-		-t-	-d-	<i>-θ-</i>	<i>-d-</i>
<i>y]</i>	<i>-t-</i>		<i>-t-</i>	<i>-jj-</i>	<i>-s-</i>	<i>-c-</i>
*-nt- <i>i/y]</i>	<i>-nt-&gt;</i>		<i>-ññ-</i>	<i>-ñj-</i>	<i>-s-</i>	<i>-c-</i>
	<i>-nt-</i>		<i>-nn-</i>	<i>-nd-</i>	<i>-θ-</i>	<i>-d-</i>

Table 6. Reflexes of Dental Past suffixes in Tamil-Toda.

Examples of palatalization: (also cf. example 1024)

1086. Ta. *cey* (*cey-t-*, (spoken) *ce-ñc-*) 'to do'. Ma. *cey* (*cey-t-*). Ko. *gey-* (*gec-*). To. *kīy-* (*kīs-*). Ko. *key-* (*kejj-*). (1628).

1087. Ta. *piri* (intr. *piri-nt-* (spoken) *piri-ñj-*, tr. *piritt-*, (spoken) *piri-cc-*) 'to be separated, separate', Ma. *piri* (intr. *piri-ññ-*, tr. *piri-cc-*). Ko. *pirnj-* (*pirnj-*), tr. *pirc-* (*pirc-*). To. *piry-* (*pirs-*) 'to be demolished'; (*pirc-*) 'to demolish'. Ko. *piri-* (*piri-ñj-*) 'to return', (*piri-c-*) 'to turn (cattle)'. (3435)

1088. Ta. *me:y* (*me:y-nt-*, (spoken) *me:-ñj-*) 'to graze', caus. *me:y* (*me:y-tt-*, (spoken) *me:-cc-*). Ma. *me:y-* (*me:-ññ-*; caus. *me:-cc-*). Ko. *me:y-(me:-c-)*, caus. *me:c-* (*me:-c-*). To. *mi:y-* (*mi:s-*); caus. *mi:c-* (*mi:c-*). Kod *me:y-(me:-nj-)*; caus. *me:-c-;* (4179)

26. 5.2 Parji also shows palatalization of the past suffix *\*-nt-* to *\*-ñj->-ñ-* in a certain class of verbs (see Subrahmanyam 1964; 1971: 201–203). Gadba shows the past suffix *-n-* in this class and it is probable that this Gadba *-n-* also is from *\*-nt-*. The verbs in this class generally end in *y* or *i:*; there are also two verbs ending in *r*; the *y* or *r* is lost before the past suffix. In Parji the long *i:* is shortened before *-ñ-*. The South Dravidian languages show *\*-nt-* in most of the cases but in cases like Pa. *koy-* (*ko-ñ-*) Ga. (Oll.) *koy-* (*ko-n-*) 'to reap' (:Ta. *koy* (*koy-t-*), 1763), we have to assume analogical replacement of *\*-t-* by *\*-nt-* in Parji-Gadba.

Examples:

- (i) Pa. *uy-* (*u-ñ-*) 'to carry, take'. Ga. (Oll.) *uy-* (*u-n-*) (:Ta. *oy* (*oy-nt-*) 'to drag along (as a flood); 831)
- (ii). Pa. *ver-* (*ve-ñ-*) 'to come'. Ga. (Oll.) *var-* (*va-n-*), (S) *va:r-* (*va-nn-*) (:SDr. *\*varu* (*\*va-nt-*); the *e* in the past stem in Parji, which is analogical to the *e* in *ver-* <*\*var-*, causes palatalization; 4311).
- (iii) Pa. *ci:* (*ci-ñ-*) 'to give'. Ga. (Oll.) *si:-* (*si:-n-*). (:Ta. *i:* (*i:-nt-*) 'to give to inferiors'; 2138).
- (iv). Pa. *noy-* (*no-ñ-<\*noy-nt-*) 'to be painful' (:Ta. *no:* (*no-nt*), *no:y-(no:y-nt-)*; 3143)
- (v). Pa. *mi:-* (*mi-ñ-*) 'to bathe'. (:Ka. *mi:(yu)* (*mi-nd-*, *mi:-d-*); 3995)

27. 1. \**p*-.

27. 1.1. There is no change in languages other than Modern Kannada. In Old Kannada, *p*- was preserved until the 10th century as evidenced by inscriptions but after that period it changed to *h*. The change became complete by the 14th century but between the 10th and the 14th centuries, forms with *p*- became less and less in course of time and forms with *h*- tended to replace them; this process is clearly seen in prose rather than in verse (see Narasimhia 1941:2).

In the 12th and 13th centuries, intervocalic -*p(p)*- also changed to -*h*- as in *ho:haru<\*po:ppar* 'they will go' *baha<bappa* 'that will come'; *baharu<bapparu<barppar* 'they will come'.

In the present-day Kannada, word initial *h*- is lost in the sub-standard dialects; inscriptions bear evidence for this even from the beginning of the 13th century: *o:gu* for *ho:gu<po:gu* 'to go' (1219 A.D.).

In the present-day Kannada, there are certain words with initial *p*-, e.g. *pakka* 'side', *paṭṭu* 'hold, seizure' (< Te.), *paduvaṇa/paduvalu* 'west', *pa:pa* 'a small child', *peṭṭu* 'a blow;

to beat with a hammer' (< Te.), *pa:l* 'share' (as opposed to *ha:lu* 'milk'), *pa:du* 'difficulty' (< Ta.), *puruđu* 'the pollution after childbirth' (< Te.), *po:lu* 'to waste, squander'; *paccadi* a kind of dish generally made of minced green vegetables' < Ta. or Te.). Most of them, if not all, seem to be borrowings from the neighbouring languages (Tamil or Telugu).

See examples 7, 26, 27, 28, 146, 580, 610, 611, 612, 613, 796, 799 and several others.

## 27. .2. \*-p-.

27. 2.1. Single \**p* in the medial position (other than after a nasal) has been weakened to *v* in Proto-Dravidian itself so that words with non-morphemic \**p* in this position are entirely absent in Dravidian (note that the *-p-* found in languages other than Tamil-Malayalam is from \*-pp-). Even in cases where we expect \*-*p-* on morphophonemic grounds i.e. as an alternant of \*-pp-, we find only -*v-* in the place of \*-*p-*; for example, in the future tense of Tamil, strong verbs take the suffix *-pp-* as in *pa:r* 'to see', future stem *pa:r pp-*, while weak verbs take -*v-* (but not \*-*p-*) as in *cey* 'to do', future stem *cey-v-*, cf. the past stems *pa:r-tt-* and *cey-t-* of the same stems showing the double *-tt-* and the single *-t-* in alternation. But \*-*p-* occurs without weakening after a nasal, for example, *tin-p-*, future stem of *tin* 'to eat' and *un-p-* future stem of *un-* 'to eat or drink'. We find the same, weakening of \*-*p->-v-* also in cases of quantitative reduction, for example, \**tapp-/tav-V-* (see example 618).

However, Old Tamil retains *-p-* of the future suffix (i) in participial nouns, e.g. *cey-p-avan* 'he who does' (contrast *cey-v-* in the finite verb), *varu-p-avan* 'he who comes' (contrast *varu-v-* in the finite verb); *ani-p-avar* 'they who (will) wear'; (ii) in 3rd person human or non-human future finite forms in which *-p-* is followed by the personal suffix *-a*,

e.g. *i:-p-a* 'they will give', *a:ku-p-a* 'they will become' and *pa:tu-p-a* 'they will sing' (see Ramaswami Aiyar 1938: 763); and (iii) in the non-past adverbial participle with the suffix *-pu*, e.g. *aru-pu* 'cutting, having cut', *taru-pu* 'giving, having given', etc. Old Tamil retains the *p-* also in verbal nouns (in most of these *-p-* is in free variation with *-v-*, e.g. *ali-pu/ali-vu* 'destruction', *uyar-pu/ uyar-vu* 'height', *tiri-pu/tiri-vu* 'change', etc.

### 27. 3. \*-pp-.

27. 3.1. \*-pp-: Ta. Ma. -pp-. Ko. To. -p-. In the rest

▼ V] -pp-, V:] -p- (in the languages that do not have the enunciative vowel, \*pp>p in the final position). Note that in some languages like Kui, Pengo and Konḍa *pp* after a short vowel is represented by *p*.

1089. Ta. *kuppai*, *kuppam*, *kuppal* 'heap'. Ma. *kuppa*. Ko. *kip*, To. *kip*. Ka. *kuppe*; *kuppu* 'to heap up'. Koḍ. *kuppi* 'a dropping of dung' Tu. *kuppe*, *kippe* 'heap' Te. *kappa*; *guppu*, *guppincu* 'to heap up, pelt (stones)'. Pa. *kuppa* 'mound'; *kopp-* 'to be full'. Ga. (Oll.) *kop-*; (S) *kuppa:* 'heap'. Go. *kuppa:*. Konḍa Pe. Mand. *kupa*. Kui *kupa* 'hillock'. Kuwi (Su) *kupli*, (P) *kuppa* 'stack'. Kur *xopp-* 'to heap up', intr. *xopr-*. Malt. *qop-* 'to heap'; *qope* 'heap'. (1440)

See also examples 614, 617, 618, 939 and 1098.

### 27. 4. \*-mp-.

27. 4.1. \*-mp-: Ta. Ma. -mp-. Ko. To.- *b-*.<sup>2</sup> Ka. V] -mb-; V:, V<sub>2</sub>] -v-. Koḍ. Tu. -mb-. Te. V] -mm-, V:, V<sub>2</sub>] -m-. Kol. Nk. Nk. (Ch.) -m-. Pa. Ga. -mb-, -b-. Go. Konḍa Pe. Mand. -m-. Kui. -mb-. Kuwi -m-, -mb-. Kur. Malt. Br. -mb.

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<sup>2</sup>. Kota words with *m(b)* like *am(b)* 'arrow' (:Ta. *ampu*, 150), *embat* 'eighty' (:Ka. *empattu*, 670) are loans.

1090. Ta Ma. *ka:mpu* 'flower-stack, handle'. Ka. *ka:vu*. Ko. *ka:y* (<Ka.) To. *ko:f*. (<Ka.). Te. *ka:ma* 'stem, stack, handle'. Go. *ka:me* 'spoon, handle'. Kuwi (F) *kamba*. (S) *ka:mba*. (1216)

1091. Kur. (LSI) *ximb-*, (Hahn) *khimc-* 'to embrace'. Br. *xumb* 'an embrace'. (1301)

See also examples 15, 18, 940 and 1093.

\*ñ.

## 28. 1. \*ñ-.

28. 1.1. It occurs in the initial position only in a few words and that too, only in Old Tamil, Malayalam, Ko<sup>z</sup>agu, and Tu<sup>z</sup>u (the Havyaka dialect of Kannada also seems to preserve this; see Shankara Bhat 1964:70). Reconstruction of \*ñ- to Proto-Dravidian in such cases is necessary because it accounts for the vowel variation *a/e* after it in the daughter languages (*a/e* alternation is found after a palatal consonant, i.e. *c, ñ* or *y*; see Burrow 1968:128–129). In Tamil, ñ is replaced in the later stages by *n-* even in literature but Malayalam faithfully preserves the original \*ñ even in the modern language.

The vowels that can occur after ñ- are only *a, a:, e* and less commonly *i* and *o:* (Malayalam has *e:* for Ta. *a:* in one case). According to *Tolka:ppiyam, eluttu*, sutra 64, initial ñ is followed only by *a:, e* and *o.* In languages other than Tamil-Malayalam, *a* and *a:* commonly but not always change to *e* and *e:* respectively.

Ko<sup>z</sup>agu, Tu<sup>z</sup>u and Havyaka Kannada preserve the ñ- only in a few cases:

Kod. ñavñd- ‘to squeeze’ (:Ma. ñamunñu, ñevinñu, 2386)

Ko<sup>d</sup>. *ñaa:na* 'shame': Ta. Ma. *na:ɳ(am)*. Ka. *na:ɳ*. Te. *na:na*.

(3014; this entry is under \*n-)

See also examples 1041 and 1092.

Tu. *ñakkaṭi*, *ñagapaṭi* 'lean, thin': Ka. *naraṭu* 'to become deficient or stunted in growth'. (2983)

Tu. *ñanñi*, *ñakki* 'crushing, bruising': Ta. *ñeri* 'to break', *neruṇku* 'to be pressed', tr. *nerukku*. (2387)

See also example 1099.

Hav. Ka. *ñakku* 'to be crushed': Ta. *ñeri* 'to break'. (2387)

Hav. Ka. *ñavṇtu* 'to chew with the gums as a toothless man': Ma. *ñamunṭu* 'to squeeze, knead'. (286)

Hav. Ka. *ñali* 'to dimple': Ta. *ñel* 'to become hollow', *ñeli*, *neli* 'to be hollow'. (2391)

Hav. Ka. *ña:ɳu* 'to become damp (papad)': Ma. *ñału* 'to be affected by cold or damp'. (2366)

See also example 1099.

Burrow (1968:133–134) has noted that, in Kannada, a set of words show *a/e* alternation after *n* and suggested that in such cases reconstruction of *ñ-* will account for the vowel alternation in spite of the fact that *ñ* has not been preserved in any language, e.g. *namalu*, *nevaru* 'to chew the cud' (also Te. *namalu*, *nemaru*, 2970), *nakku*, *nekku* 'to lick' (2945), *naccu*, *neccu* 'to confide in; desire, love' (2951), *naḍu*, *neḍu* 'to fix firmly' (2958), *naṇṭu*, *neṇṭu* 'relationship, friendship' (2962).

#### Examples:

1092. Ta. *ñanṭu*, *ñenṭu*, *nanṭu*, *naḷli*, *naḷir* 'crab, lobster'. Ma. *ñanṭu*, *nanṭu*. Ko. *nayl(n)*. Ka. *esaḍi*, *e:ḍi*, *naḷli*, *laḷli*, *enḍra ka:yil(<Te.)*. Ko<sup>d</sup>. *ñanḍi*; *ñanḍrikē* 'scorpion'. Tu. (B) *eñeñji*, (C) *deñji*, *deñji*, *jeñji* 'crab'. Te. *enḍri*, *enḍrika*,

*en̄draka:ya* Kol. (Kin.) Nk. *ende*. Pa. *iṛdi*. Ga. (Oll.) *irid*. Go. *e:ṭe:*. Konḍa *re:to* (2362).

1093. Ta. *narampu* 'nerve, tendon, sinew'. Ma. *ñarampu*, *narampu*, (Tiyya) *ñeravu*. Ko. To. *narb*. Ka. *nara*, *naravu*. Tu. *nara*, *narambu*. Te. *naramu*. Kol. (Kin.) *naram*. Pa. *nerub*. Ga. (P) *narub*. Kui *dra:mbu*. Kuwi (S) *naromi*, Go. (Koya.) *naram*. Kur. *nari*: 'pulse' (?<IA). Malt. *na:ru* 'the veins' (?<IA). (2364)

1094. Ta. *ña:ncil*, *na:ñcil* 'plough'. Ma. *ñe:ñño:l*, *ne:ññil* 'plough-shaft'. Ko. *ne:lg* 'plough'. Ka. *ne:gal*, *ne:gil(a)*. Kod. *ne:ñgi*. Tu. *na:yeri*. Te. *nā:gali*, *nā:gelu*, *nā:ge:lu*. Kol. *na:ñgli*, (Kin.) *na:ñeli*. Nk. Nk(Ch.) *na:ñgar*. Pa. *nā:gil*. Ga. (Oll.) *na:ñgal*, (S) *na:ngal*. Go. (W) *na:ñge:l*, (A) *na:yña:l*. Konḍa *na:ñgel*. Te. *na:ñgel*. Mand. *ne:ñgel*. Kui. *na:ngeli*, Kuwi (F) *nangelli*. (2368)

1095. Ta. *ña:yiñu*, *na:yiñu* 'sun'. Ma. *ña:yiñu*, *ña:yañu*, *ña:ṛu* (in cpds. e.g. *patiña:ru* 'setting sun'). To *nō:ṛ*. Ka. *ne:sar(u)*. Tu. *nesüri*. Malt. *ni:ru* 'sunshine, heat'. Br. *de:* 'sun, sunshine, day, time'. (2371; DEDS shifts the Br. word to 3128 on the suggestion of Krishnamurti but it is not necessary to do so; see chapter 30, note 2).

1096. Ta. Ma. *ña:lam* 'earth, land'. Te. *ne:la*. Kol. Nk *e:l*. Go. *ne:li*:. Konḍa (BB) *ne:le*. Pe. *ne:la*; *ne:l* 'hill-field'. Ma. *ne:l* Kui *ne:la*, *ne:de*. Kuwi (F) *ne:'la*? Kur. *na:l* 'low fields, terraced fields'. (2374)

1097. Ta. *ña:ñṛu* 'time, day', *ña:ñṛai* 'at the time of'. Ma. *ña:nnu* 'day'. Kod. *moni a:ndi* 'day before yesterday', *ninna:ndi* 'yesterday'. Te. *nē:du* 'today', *nā:du* 'day'. Nk (Ch.) *na:n* (obl. *na:t-*). Go. *ne:nđ* 'today'. Konḍa *ne:ñṛu*. Pe. *ne:njeñ*, *ne:ci ba:r* 'today'; *ne:cañ* 'from today'; *na:nj* 'day'. Mand. *nenj(e)* 'today', Kui. *netnju*, Kuwi (Su.) *ni:nju*, (P) *ne:niu*. (2381).

1098. Ta. *neruppu* 'fire'. Ma. *ñerippu*, *nerippu*; *ñeri* 'heat, burning, pungency'. Ko. To. *nep* 'live coal'. Te. *nippu*, *nippuka*. Kol. (Kin) *nipp-* 'to kindle'; *nipka* 'small piece of fire'. Pe. *nir-* 'to biaze'; *nirkip-* (*nirkit-*) 'to kindle'. Ga. (S) *nirik-* 'to light a lamp'; (S<sup>2</sup>) *niruk-*. Go. *niru*:- 'to burn, catch fire'. Kur. *dre*; 'ignition; a flare'. Kur. *niyū:r* 'embers, brand'. Malt. *nare* 'flame'; *narG-* 'to rise up in flames'; *narGtr-* 'to blow up a fire, reproach severely'. (2389)

1099. Ma, *ño:la* 'saliva'; *no:la* 'glutinous fluid'? To. *we:L*. Ka. *no:li*, *lo:la*, *lo:li*, *lo:lu*, *lo:le*, *logađi*, *lodađi*, *lodaļi*, *lodaļe*, *lodle*, *lo:yi*, (Havyaka) *ñoł:i* saliva, slaver'. Tu. *udale*, *no:ne*; *ño:li* 'glutinous, saliva', note (B) *ño:li* 'glutinous fluid (as in ladies fingers)'; *ño:le* 'saliva, esp. of animals'. (2397)

(In non-initial positions \*ñ is extremely rare except before \*c (see 23. 4.); Old Ta. *maññai* 'peacock' is exceptional.)

\*n.

As *n* is a retroflex, it does not occur in the initial position.

A dental plosive after \**n* is changed to the retroflex plosive, e.g. *un* (*uɳ-t-*) 'to eat or drink', caus. *utʈ-* < \**uɳ-tt-*, (516).

### 29. 1. \*-n(-).

29. 1.1. \*-n(-): Ta. Ma. Ko. To. Ka. Kod. *n*. Tu. (B) *n*, (C) *n*.<sup>1</sup> Te. Kol. Nk. Nk(Ch). Pa. *n* Ga. (Oll.) *n,n*, (S) *n*. Go. *n*. Konda *n*. Pe. Manda. *n,n*. Kui Kuwi *n*, *n*. Kur. Malt. Br. *n*.

In Telugu inscriptions, *n* occurs upto the 9th century: *a:nati* 'command' (>*a:nati*), *pani* 'work' (>*pani*), *koni* 'having taken' (>*koni*); the inscriptional evidence shows that the change *n>n* took place in the period between 7th and 9th centuries

Gadba, Konda, Pengo, Manda, Kui and Kuwi retain *n* in a number of cases but there are cases where it changes to *n*; the details are not yet clear. For Gondi also, *n* must be set up at the morphophonemic level, for example, the past stem of *un* (<\**un*) 'to drink' is *utʈ-* while that of *tin* 'to eat' is *titt-*. In Kui-Kuwi *n* is regularly preserved at the end of verb bases.

See examples 25, 26, 254, 339, 865 and 867.

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<sup>1</sup>. cf. (B) *kinki*, (C) *kinki* 'to pinch' (1322); (B) *ke:nii* (O) *ke:nii* 'to hear' (1677); (B) *anne*, (C) *anne* 'elder brother' (112).

*\*n* and *\*ṇ*

### 30. 1. Evidence for original contrast.

30. 1.1. In languages other than Old Tamil and modern spoken Malayalam, the dental *n* and the alveolar *ṇ* are in complementary distribution in as much as *n* occurs before a dental stop and *ṇ* occurs in all other positions. In spoken Malayalam, they contrast in doubling. Historically, the dental *nn* is derived from either *\*ṇt* or *\*nt* while the alveolar *ṇṇ* is the continuation of the same proto sound sequence. Therefore, spoken Malayalam has contrasting pairs like the following, although the difference is not shown in writing.

<i>punna</i> 'mast-wood'	<i>kunnu</i> (< * <i>kunṭu</i> ) 'hill'
<i>enṇatil</i> 'by me'	<i>enna:l</i> (< * <i>enṭa:l</i> ) 'but'
<i>ninna:l</i> 'by you (sg.)'	<i>ninna:l</i> (< * <i>ninṭa:l</i> ) 'if (one) stands'
<del>■</del> <i>tanna:l</i> 'by self'	<i>tanna:l</i> (< * <i>tanta:l</i> ) 'if (one) gives'

30. 1.2. The Tamil script has two different symbols for the dental *n* and the alveolar *ṇ*; normally, *n* is used in the initial position and before *t* and *ṇ* in other positions. However, Old Tamil has a number of words in which the dental *n*

occurs in non-initial positions (even other than before *t*).<sup>1</sup> In modern spoken Tamil, the word-initial *n* is alveolar but in writing it is represented by the dental *n*; this is due to the continuation of the old practice, which perhaps represents the pronunciation at the time when the script was devised; note that the dental pronunciation of the word-initial *n* has been preserved by Malayalam. In the inscriptions of the middle Tamil period, the two nasals are confused and the alveolar nasal occurs more commonly; this indicates that by that time the dental nasal disappeared from the language in positions other than before *t*.

30. 1.3. The Old Tamil material on the occurrence of the dental *n* in non-initial positions has been collected and analysed by S.V. Shanmugam (1972). According to him, the words that contain the dental *n* (in positions other than initial and before *t*) fall into three types: (i) participial nouns in which the *n* is the non-past marker; (ii) nouns derived from other nouns by the addition of *-n-ar*, and (iii) nouns in which the *n* has no morphemic value.

In participial nouns, the non-past suffix, which is basically *-un-*, optionally loses the vowel after *i*, *ai*, *l* or *r* (the *u* is compulsorily lost after the verbs of the type (C)V<sup>v</sup>C<sub>u</sub>, e.g., *varu-n-ar* 'those who come'; *aṭu-n-ai* 'you(sg.) who will kill'); *keṭku-n-ar* 'those who hear'; *ka:n-un-an* 'he who sees', *koyy-un-ar* 'they who pluck'; *va:l-(u)n-ar* 'they who live', *pakar-n-ar* 'sellers'; *ce:r-un-ar* 'they who will seek', *ati-n-ai* 'you (sg.) who know'; *atiy-un-ar* 'they who know'; *poru-n-ar* 'those who fight, enemies'. Shanmugam tries to derive this *-un-* from the more common non-past suffix *-um-* saying that *m* becomes *n* before

<sup>1</sup>. V. I. Subramoniam (1968) argued for considering the nasals, *n̄*, *n̄* and *n̄* also as phonemes in addition to *m*, *n̄* and *n̄* in Tamil-Malayalam.

-a. Apart from the fact that the rule is phonetically unmotivated, there are counter examples like the following in which the *m* is unchanged before -*a*: *en̩-m-ar/en̩-m-an̩-a:r* ‘those who say so’, *a:t-um-a:r* ‘those who dance’, *ka:n̩-m-a:r* ‘those who see’, *un̩-m-ar* ‘those who eat’, etc.

In nouns derived from nouns by the addition of -*n-ar* as in *vilai-n-ar/vilai-ñ-ar* (the *n* is palatalized to *ñ* after *y* in the second form, <*vilai* ‘price’) and *valai-n-ar* ‘fishermen’ (<*valai* ‘net’) the -*n-ar* seems to have been extended from participial nouns of the above type.

As shown by Shanmugam, most of the words that contain *n* in the medial position can be interpreted as compounds in which the second word begins with *n*: *nerunal/nerunai* ‘yesterday’ is *neru* ‘previous’ + *nal/nai* (*nal* is relatable to *al* ‘night’, in which the initial *n* has been lost; *nai* occurs also in *piñ-nai* ‘nextday’ and *muñ-nai* ‘previous time’ and it means ‘day or time’. *koñunay* ‘husband’ may be the participial noun from *koñu* ‘fertile’ and *porunai* ‘name of a river’ may be *poru+nai* < Skt. *nadi*: ‘river’. The word *verin* ‘back’, in which *n* occurs in the final position (contrast *var-in* ‘if (one) comes’) is derived by Shanmugam from \**verim* (cf. To. *pem*, 4518) by positing the rule *m → n / i—{# & V}*; cf. *verin-a* ‘of the back’ (he notes that the sequence *im* is not tolerated in Tamil so that the oblique base of *ni:m* ‘you (pl)’. i.e. *nim* later becomes *num-*, *um-*; cf. also the 2nd person imperative pl, suffix: Ta. -*um*, Old Ka. -*im*).

30. 1.4. Of all the evidence, that of the non-past dental suffix is very strong for reconstructing the contrast between the dental and the alveolar nasals to Proto-Dravidian. As has been pointed out above, Shanmugam’s attempt to derive the suffix -*un-* from \*-*um* is not fully convincing. Even if we accept

this proposition for the sake of argument, one intriguing question would be why the \*m resulted into n, which otherwise does not occur in this position, rather than into the alveolar n̪, which normally occurs in this position.

30. 1.5. In Old Tamil, the n sound that occurs initially is dental according to *Tolka:ppiyam* (*Eluttu*, sutra 61). Shanmugam is of the opinion that in Proto-Dravidian too, the initial n was dental and that it was later replaced by the alveolar in all languages including Tamil (in Malayalam, the initial n is dental even now). Krishnamurti (1978a:3, note 4) endorses Shanmugam's view.

See examples 9, 15, 250, 251, 252, 258, 336, 337 and several others.

30. 1.6. Note that the alveolar n̪ changes the following dental plosive to the alveolar plosive. This is commonly found in the past stem formation of verbs, e.g. \*tin̪ (\*tin̪-t-<\*tin̪-t-) 'to eat', \*yan̪(\*yan̪-t-<\*yan̪-t-) 'to say so', etc.

### 30. 2. Loss of initial \*n-.

30. 2.1. Initial \*n- is occasionally lost in many Dravidian languages, as noted by Burrow (1968:73). This is not a regular change in any particular language but examples of this change occur in most of the languages; Kol. Nk. *adg-* 'to walk' (< \*nat-a, 2957); Ko. *Ja:m* (am-) 'we (incl.)'; To. *om-(om-)* (< \*na:m, 3019); Kol. Nk. *il-* 'to stand', Kur. Malt. *il.* (< \*nil, 3043); Tu. *i:* 'you (sg.)', Te. *i:vu*, Pa. Ga. *i:n* (*in-*) (< \*ni:(n), example 250); Tu. *i:rī* 'you (pl.)', Te. *i:ru*, Pa. Ga. *i:m* (*im-*). Go. *immaṭ*, Kui *i:ru* (< \*ni:m, \*ni:r, example 251); Ta. Ma. *i:r*, *i:ram* 'moisture'; Kol. Nk. *i:r* 'water' (< \*ni:r 'water', example 252); Kur. Malt. *ess-* 'to weave, plait' (< \*ney, 3103), Kol. Nk. Nk (Ch.) *ari* 'fear', *ars-* 'to fear' (:Pa. *nar* 'fear', *narc-* 'to fear', 2980); Nk(Ch.) *ettur* 'blood' (< \*nettūr, example 351).

**30. 3. PDr \*n → Br. d /- F.V.**

30. 3.1. Krishnamurti (1969a) has shown that PDr. \*n- changes to *d*- in Brahui before an original front vowel (it does not change before other vowels). Examples are:

- (i) Br. *ditar* 'blood' < \*ne(y)ttV(:)r (example 351)
- (ii) Br. *daro:* < pre-Br. \**dero:* (< \**nero:*) 'yesterday' < *net-* (example 609)
- (iii) Br. *de:* 'sun, daytime' < \*ñ*a:cVi-* (example 1095)<sup>2</sup>
- (iv) Br. *di:r* 'water' < \*ni:r (example 252)
- (v) Br. *dann-* (pres. *de:-* impf. *da-*, *dar*, *darak*, past *dave:-* 'to cut (of a knife), blight, usurp, carry off' < pre-Br. \**der-/den-* < \**ner-\*nen-*, cf. Ta. Ka. *ne:r* 'to cut off' (3127).
- (vi) Br. *de:r, de:* 'who (sg. pl.)' < \**ne:r*, cf. Kur. *ne:* 'who', Malt. *ne:re(h), ne:ri(th), ne:rer*, 'who, which man, woman, men, etc.' (4228).

\*n- remains as Br. *n-* before non-front vowels, eg. Br. *narr-* 'to flee, run away' (:Pa. Ga. *nar* 'fear', [2980]), Br. *nan* 'we' (< \**na:m* 2980), Br. *nus-* 'to crush, grind' (< \**nu:f-*, 3089).

The change \*e > Br. *a* seen in the second and the fifth words above must have operated after the change of \*n > *d*- because the front vowel must have been there when the latter change operated.

<sup>2</sup>. Krishnamurti (1969a: 66) questioned the connection of Br. *de:* with Ta. ñ*a:yiru*, etc. (2371), which was proposed by Sir Denys Bray and accepted by DED and suggested its connection with Ta. Ma. *ne:ram* 'time, sun', etc. (3128). DEDS accepted this suggestion and the Brahui word has been shifted in it to 3128. There is no need for this change because \*ñ*a*; can yield pre-Br. *ne:-* (note that this is a very early change: see Subrahmanyam 1973:144). Note further that Kur. Malt. *ne:r-* 'to get dry' (3131) can be connected with the words for 'sun' in 2371.

This shows that Br. *du:i*: 'tongue' is not connected with \*na:, \*nai:l 'tongue' (3009). The only case which gives some difficulty is Br. *ni:* 'you (sg.) < \*ni:(ŋ) (example 250). As noted by Krishnamurti, the genitive form *na:* of this, in which \*n- need not change to d- must have prevented the change in the nominative. In the case of Br. *num* (*num-*) 'you (pl.), which is from the oblique base \*nim- of \*ni:m 'you (pl.)' (example, 251) the change of *i* to *u* occurs in the Tamil oblique form also and hence it may be quite earlier to the change of \*n- > Br. *d-*.

#### 30. 4. \*-ŋ in Kannada and Tuḷu.

30. 4.1. In Old Kannada, final *ŋ* merges with *m* before pause, e.g. *avam* 'he' < \**avayŋ*, *bandam* '(he) came' (cf. Ta. *vanta:ŋ*). In Modern Kannada, The 1st sg. and 3rd masc; sg. personal endings lose the *n* which was originally present, but it reappears before clitics like the interrogative, e.g. *ho:de* 'I went' but *ho:den-a:* 'did I go?' *ho:da* 'he went' but [*ho:dan-a:* 'did he go?'. A similar situation exists in Koḍagu also (see 17.3.1.).

30. 4.2. In Tuḷu, the masculine suffix (in nouns as well as in finite verbs) \*-aŋ regularly change to -e, e.g. *aṇne* 'elder brother' < \**aṇṇan* while the 1st person sg. suffix \*e(:)ŋ changes to ε. In both the cases, the *n* is lost but in the plural (i.e. before a vowel) the *n* reappears as in *aṇṇan-a:kuḷu*.

\*m remains as m in all the languages.<sup>1</sup>

### 31. 1. \*-m > Ka. Kod. Tu. φ.

31. 1.1. In Kannada, Kodagu and Tuļu word-final *m* is lost, e.g. Ka. Kod. Tu. *mara* < *maram* (3856);<sup>2</sup> note that in monosyllabic words, final *m* takes the enunciatative vowel and changes to *v* in Kannada, e.g. *na:m* > Ka. *navu* 'we' (3019). This change i.e. loss of final \**m* must have spread from Kannada to the neighbouring languages, Tuļu and Kodagu.

<sup>1</sup>. Krishnamurti (1969a) has suggested that in Brahui \**m*- changes to *b*- before a front vowel as in the case of \**n*- > *d*-, e.g. Br. *bei* 'grass fit for grazing' < \**me:y* 'to graze' (4179), Br. *be:* 'over, on' < \**me:(l)* (4173).

<sup>2</sup>. The Hayyaka dialect of Kannada retains the nasal before the plural suffix. e.g. *marañ-go* : Std. Ka. *mara-gaļu* 'trees', *mañga-go* : Std. Ka. *mañga-gaļu* 'monkeys'. Note that Old Kannada retained the final nasal in both sg. and pl., e.g. *marañ* 'tree' pl. *marañ-gaļu*. cf. the accus. *marañ-am*. Similarly, the Brahmin dialect of Tuļu also retains the final *m* before the pl. suffix, *mara* 'tree', pl. *marañ- klu* (C) *mara-kuļu* 'trees'.

**31. 2. \*-m/\*-n alternation.**

31. 2.1. In Old Tamil, final *m* in neuter nouns alternates with *n* as in *maram*, *maraṇ* 'tree', *kuḷam*, *kuḷaṇ* 'tank'. This alternation must belong to the proto-stage because in addition to Tamil, Telugu often shows the *n* forms, e.g. Te. *mra:nu* 'tree', *kolanu* 'tank' etc. Old Kannada has *kaḷan* 'battlefield' (Ta. *kaḷam/n*), *koḷan* 'tank', *peṇan* 'corpse' (:Ta. *piṇam/n*), *maran* 'tree' with *n* as opposed to *daḷimbam* 'white cloth', *o:ḍam* 'boat', etc. with *m* (see Ramachandra Rao 1972:50).

See examples 29, 251, 340, 622, 1061, 1082, 1084 and others.

### 32. 1. \*y-.

32. 1.1. Initial \*y- occurs only in Old Tamil in a few words, and, in all of them, it is followed by long *a*: (*Tolka:ppiyam, eluttu*, Sutra 65 says that initial *y* will be followed only by *a*:). By the middle Tamil period, the *y-* in these has been lost. The other South Dravidian languages too lose the *y-* like later Tamil but the central languages including Telugu and the northern languages show *e*: corresponding to Old Tamil *ya:-*. K.V. Subbaiah (1909) sought to explain this correspondence by reconstructing the vowel *æ*, which is half-way between *a*: and *e*:.. Burrow (1968:118), on the other hand, pointed out that the sequence *ya:-* found in Old Tamil can be assumed for Proto-Dravidian to explain this correspondence and that reconstruction of a vowel that is not needed otherwise is unnecessary.

Burrow's explanation is quite convincing because *a:/e:* variation in languages is quite common after the other palatal consonants, i.e. *c* and *ñ* too, cf. Ta. *ce:r* (2930)/ *ca:r* (2312) 'to reach'; for examples after *ñ*, see Chapter 28.

It must be noted that although in Tamil, *y* is not followed by short *a* this sequence was permissible in Proto-Dravidian

because the oblique bases of \**yaiñ* 'I' and *yam* 'we (excl.)' have to be reconstructed as \**yai-* and \**yam-* respectively (for further details, see Subrahmanyam 1967-68). The sequence \**ya-* in these has changed to *e-* in Tamil and other southern languages and in North Dravidian. The same sequence can be reconstructed to explain the correspondence in the following three cases:

- (i) Ta. Ma. Ka. Kod. *en* 'to say'. Ko. *in-*, To. *in-*. Tu. *an-*, *in-*. Te. *anu*. Kol. Pa. *en-* Ga. *in-*. Go.-Kuwi *in-*, Kur. Malt. *a:n-* PDr. \**ya:y-/yan-* (737)
- (ii) SDr. *ati* 'to know'. Te. *erūgu*. PDr. \**ya!-V-*. (265)
- (iii) SDr. \**alu* 'to cry, weep'. Te. *e:dcu*. Kol. Nk. *ar-*, Pa. *ar-* Ga. (Oll.) *ar-*, (S) *a:d-*. Go. *a:r-*, *ar-*. PDr. \**yal:-/yal-V-* (240)

#### Examples:

1100. Ta. *at̪l* (*a:n̪t̪-*) 'to rule', (inscr.) *ya:l* Ma. *a:l* (*a:n̪t̪-*) Ko. *a:y-* (*a d̪-*). To. *o:l-* (*o:d-*). Ka. *a:l* (*a:ld-*). Kod. *a:l-* (*a:li-*). Tu. *a:li-*. Te. *e:lu*, (inscr.) *e:lu*. PDr. \**ya:l-* (341); the occurrence of *ya:l* in Tamil inscriptions of the 9th century has been noticed by Shanmugam (1966); earlier Krishnamurti (1961:90) posited \**ya:-* for this group and for the group in DED 240).

1101. Ta. *ya:t̪u*, *a:t̪u* 'goat, sheep'. Ma. *a:t̪u*, Ko. *a:r* 'goat'. To. *o:d*, Ka. *a:du*. Kod. *a:d̪i*. Tu. *e:di*. Tu. *e:dika*, (B) *e:ta* 'ram'. Go. *e:ti*: 'she-goat'. Pe. *o:da*. Mand. *u:de*. Kui Kuwi *o:da*. Kur. *e:ra*. Malt. *e:re*. Br. (h)*e:t̪*. (4229)

1102. Ta. *ya:mai*, *a:mai* 'tortoise'. Ma. *a:ma*. Ko. *e:m(b)*. Ka. *a:me*, *a:ve*, *e:ve*, *ta:be:lu*, *ta:mbe:lu* (prob. < Te). Kod. *a:me*. Tu. *e:me*. Te *tā:be:lu*, *ta:mbe:lu*, *ta:me:lu*. Go. (M) *hemul*, (G.) *he:mul*, (Koya) *ya:mo:l*, (Mu.) *samel*, *hamul*, Pe. *ha:may* 'a kind of large tortoise'. Kui *se:mbi* 'tortoise'. Kuwi (S. Su.)

*ta:mbeli*, (P) *he:mbi*. (4232; The Telugu-Kuwi forms require the reconstruction of \*c- while others require \*y-. The reason for this discrepancy is not clear.)

1103. Ta. *ya:nai*, *a:nai* 'elephant'. Ma. *a:na*. Ko. To. *a:n* Ka. Ko~~d~~ *a:ne*. Tu. *a:ne*. Te. *e:nūgu*, *e:nika*. Kol. *e:ngi*. Pa. *e:nu*. Ga. *e:nig*. Go. *e:ni*; Konda *e:ni*, *e:ngu*. (4235).

1104. Ta. *ya:n*, *na:n* (*e:n*-) 'I'. Ma. *ñā:n*, (early inscriptional) *na:n* (*en*-). Ko. *a:n* (*en*-). To. *o:n* (*en*-). Ko~~d~~. *na:(ni)* (*en*-) *nan-*, *na:-*). Ka. *a:n* (*en*-), *na:nu* (*nan*-). Tu. *e:nī*, *ya:nī* (*en(a)*-), Te *e:nu*, *ne:nu*, (*nan*- [Accus], *na:-*). Konda *na:n* (*na:-*) Pe. *a:n(eñ)* (*na:-*). Mand. *a:n*. Kui. *a:nu*, (K) *na:nu* (*na:-*). Kuwi *na:nu* (*na:-*). Kol. Nk. Nk. (Ch.) Pa. Ga. *a:n* (*an*-). Kur. Malt. *e:n* (*eng*-). Br. *i:* (*kan*-). (4234; PDr. \**ya:n* (\**yam*-). The forms with initial *n*- (Ma. *ñ*-) in Ta.-Ka. are later and analogical to the inclusive pl forms; similar forms in Te.-Kuwi are analogical to the oblique base. PDr. \**yam* > PSDr. PNDr. \**en*-; PCDr. \**an*- > Te.-Kuwi *na:-*.)

1105. Ta. *ya:m* (*em*-), *ya:nkał* (> later *na:nkał*) (*eñkał*- 'we (exclusive)'). Ma. *ñā:ññał* (Old. *eníñał*-, later *ñāññał*-). Ko. *a:m* (*em*-). To. *em* (*em*-) Ko~~d~~. *eṅga* (*eṅga*-), *naṅga* (*naṅga*-) 'we'. Old Ka *a:m* (*em*-) 'we (excl.)'. Tu. *eñkułu* (*eñkułe*-). Te. *e:mu*, *me:mu* (*mam(m)*- [Accus; *ma:-*]). Go. *ammał*. *mam(m)a:ł*, *mammo*, *mara:ł*, *ma:ł* (*mai*-). Konda *ma:p*, *ma:n* (*ma:-*). Kui *a:mu*, (K) *ma:mu* 'we (excl.)'; *a:ju* 'we (incl.) (for both *ma:-*). Kuwi *ma:mbu* 'we (excl)'; *ma:r(r)o* 'we (incl.)' (for both *ma:-*). Kol. Nk. Nk. (Ch.). Pa. Ga. *a:m* (*am*-) 'we (excl.). Pa. *amor* 'we (incl.)'. Kur. Malt. *e:m* (*em*-). (4231; PDr. \**ya:m* (\**yam*-). Original oblique bases replaced the nominatives in Mod. Ma. To. Ko~~d~~. Tu. PDr. \**yam*- > PSDr. PNDr. \**em*-, PCDr. \**am*- > Te.-Kuwi *ma:-*. Nominative forms with *m*- in Te.-Kuwi are analogical to the oblique base).

See also examples 1062 and 1064.

**32. 2. \*-y(-).**

32. 2.1. *y* in medial and final positions (except in *ay*) undergoes no change except in Kui in which it appears as *j*, e.g. *kaju* 'hand' < \**kay* (example 942)

See examples 9 and 744 to 752.

Note that medial *-k-* in certain languages and *-c-* in many are often weakened to *y* (see 22. 2. and 23. 2.2) and medial *-y-*, either that from *\*-c-* or original is often lost giving rise to contractions of the preceding and the following vowels in many languages (see 23. 2.2.)

32. 2.2. \**ay* in the first syllable changes to *eiy*, *ey* in Telugu, e.g. \**kay* > Te. *ce:yi*, *ceyyi* 'hand', \**vay* > Te. *ve:yu* 'to throw' etc.; (see 14.3) this development is found in some other CDr. and NDr. languages (see example 942)

32. 2.3. PDr. *\*-ay* has special developments: Ta *-ai* (structurally *ay*; colloquial *-e*).<sup>1</sup> Ma. *-a* (but accusative *\*-ay* > *-e*). Ko. *ɸ* (< pre-Kota *\*-e*). To. *ɸ* (pre-Toda *\*-a(y)*). Ka. Ko<sub>d</sub>. *-e*. Tu. *-ε*. Te. *-a*. Go. *-a:*. Konda *-a* (see examples 23, 577, 607, 760, 763, 766, 767, 783, 1102 and 1103).

32. 2.4. Note that Kota and Toda words with *-y* corresponding to *\*-ay* are all loans since the regular correspondence in these languages is *-ɸ* (this was pointed out by Professor M.B. Emeneau in a private communication); see examples 90, 95, 360, 512 and note 2 on p. 263.

<sup>1</sup>. It has been pointed out by many scholars that *ai* and *au* in Tamil and other Dravidian languages are not real diphthongs and that they can be considered on structural grounds as *ay* and *av* respectively; the former does not contrast with the latter (see Zevelebil 1970:70–72 and Shanmugam 1973); cf. alternant forms like Ta. *paiyan*, *payyan* 'boy' and Ka Te. *ayidu*, *aidu* 'five'. As pointed out by Shanmugam, consideration of Ta. *ai* as *ay* allows simpler morphophonemic rules, for example, the alternation in *annai* 'mother', vocative *anna:y* can be

accounted by the already existing rule which states that in the vocative the vowel of the final syllable is lengthened (as in *makkal* 'people', voc. *makka:l*); otherwise another rule namely, *ai* → *a:y* in the vocative has to be posited. Similarly, the rule for palatalization of dentals will contain as the conditioning environment *i* and *y* and *ai* need not be included there, cf. *a:ycci*, *a:yitti* 'shepherd woman', *nakacci*, *nakaitti* 'a smiling woman' (see also example 1024). The personal endings of verbs contain a long vowel if not preceded by the *ca:riyai*-*an-* but they contain a short vowel if preceded by -*an-* as in *va-nt-a:y* but *va-nt-an-an* 'he came'; accordingly, in 2nd person sg., *-a:y* alternates with *-ai* and this indicates that *-ai* is actually *-ay*, e.g. *va-nt-a:y* but *va-nt-an-ai* 'you (sg.) came'.

The change *-ai* > *-e* in Tamil is attested in earliest Pallava inscriptions from the 7th century onwards; e.g. *ellai* > *elle* 'boundary', *vilai* > *vile* 'price'.

\*r.

Its reflexes do not occur in the initial position except in Telugu-Kuwi (see Chapter 16).

### 33. 1. \*-r(-).

33. 1.1. \*-r(-): *r* in all the languages; Brahui also *-rr-*, Toda has *r*, *s* and *ʂ* as well as loss (see 33. 2.) Among the Gondi dialects, the dialect of Chindwara, the eastern dialect of Muria and Malkanagiri Koya have *r̪* for \**r*; in others it is retained. Note that in some areas of the Chindwara district itself, *r* occurs for both *r* and *r̪* of the other dialects; the precise dialect divisions are not yet known (see Burrow and Bhattacharya 1960:74-75).

Old Kannada retains the *r* when it is the first member of consonant clusters that resulted through the loss of the derivative vowel, but in modern Kannada it is assimilated to the following consonant, e.g. Old Ka. *mardu*, Mod. Ka. *maddu* 'medicine' < \**maruntu*, example 1084); see also examples 346, 347 and 1085.

In Telugu, the *r*, which is the second member of initial consonant clusters that resulted through metathesis was retained in Old Telugu, but it is lost in modern Telugu, e.g. Old Te. *mra:nu*, Mod. Te. *ma:nu* 'tree, log' < \**maram/n* (example 800);

for the rare loss of medial *r* in Telugu, see examples 346, 1084 and 1085.

In Telugu \**r>n* before a nasal, e.g. *enumu* 'buffalo' (:Ta. *erumai*, example 347) and *inumu* 'iron' (:Ta. *irumpu*, 411); also cf. the adj. *inu* 'two' (< \**iru-*) in *inuma:ru*, 'twice'.

See examples 23, 30, 143, 206, 251, 252, 347, 351, 798, 800, 802, 804, and others.

### 33. 2. PDr. \**r* > To. *r*, <sup>v</sup>*s*, *ʂ*, $\phi$

33. 2.1. The developments of Proto-Dravidian \**r* in Toda are outlined by Emeneau in his 1958 paper but the conditioning factors for the diverse developments were given in Subrahmanyam's 1977a paper as far as it is possible.

In Toda there are four developments for PDr. \**r*. They are 1. *r* (post-dental one-flap tremulant), 2. <sup>v</sup>*s* (apico-alveolar palatalized sibilant), 3. *ʂ* (retroflex sibilant) and 4.  $\phi$ , i.e. loss. Of the four developments, *r*, which is a retention, is the most common one and the loss also occurs in a fairly large number of cases. <sup>v</sup>*s* and *ʂ* occur only in a few instances, the former in about twenty and the latter in about ten. This paucity of the material regarding the developments <sup>v</sup>*s* and *ʂ* makes the determination of the conditioning factors considerably difficult although some generalizations can be made.

33. 2.2. We shall first take up the cases where PDr. \**r* is lost. These should be divided into two classes, one in which the loss gives rise to the coalescence of the preceding and the following vowels into a long one and the other in which the root vowel remains without change after the loss of \**r*. Coalescence of the preceding and the following vowels takes place only when the word ends in a retroflex consonant or consonant

cluster or in *\*m/\*n* which in this case becomes *n* in Toda. This has already been pointed out by Emeneau (1958:61): "The following retroflex phoneme then is probably to be stated as a determining factor in the development". When coalescence takes place the root vowel is lengthened and the second vowel is lost. When the word ends in any other consonant, the root vowel is simply retained and the vowel of the second syllable is lost as is the case in general.

The following are the cases where the dropping of *\*r* is followed by coalescence.

1106. To. *i:ty* 'double, even (of numbers)': Ta. *irat̪ti* 'double quantity' (401)

1107. To. *u:n* 'pith' : Ta. *uram|urany* 'strength, heart of a tree'. (558)

1108. To. *i:L* 'night' : Ta *iruł* 'darkness'. (2102)

1109. To. *tu:l-* (*tu:d-*) 'to be rolled up (curl, leaf)'. *tu:t-* (*tu:ty-*) 'to roll up (tr.)', *su:t* 'cigar' (l.w. < Ta *curułtu*) : Ta. *curuł* 'to roll (intr.)', *curułtu* 'to roll up'. (2211)

1110. To. *mī:d-* (*mī:dθ-*) 'to look fiercely' : Ta. *mirał* *mirał* 'to be frightened'. (4164)

1110a. To. *pe:L* 'finger' : Ta. *viral*. Ka. *beral*, *berał*. (436)

1111. To. *pe:l-* (*pe:d-*) (buffaloes) are frightened and run away', *pet̪t-* (*pe:ty-*) 'to frighten '(buffaloes)' : Ta. *veruł*, *virał* 'to be startled', *verułtu* 'to terrify'. (4519)

1112. To. *ko:L* 'friend' : ? Ka. *karuł*, *karału* 'an entrail, the bowels; love'. (1070; this etymology, given in *DEN* with a query, is quite impossible because *\*a* never changes to To *o* before *r*; a better alternative, which however is not wholly satisfactory, is to connect this with *\*ko:l* 'taking, holding, accepting', verbal noun from *kol* 'to take'. 1788)

See also examples 176, 206, 270, 282, 311, 324, 800 and 804.

33. 2.3. There are many instances for the loss of \*r not accompanied by coalescence of the vowels (i.e. when not followed by a retroflex or \*m/\*ɳ).

Examples:

1113 (= 206). To. *i* 'two' before a consonant (in *ifoθ* 'twenty', *i nu:t* '200', *ikwa:w* 'two *kwa:x* measures') : \**iru-* adj. 'two'. (401)

1114. To. *uf* 'back of trunk of body', also *urp* 'form, idol': Ko. *urv* 'trunk of body'. (566)

1115. To. *o-* 'one' before a consonant other than *t* but *os* before *t* (in *o kwa:w* 'one *kwa:x* measure', etc) : \**oru-*. (834(a))

1116. To. *ka*, *kax*, *kaxt* 'black', *kabin* (< \**karum pon*) 'iron': Ta. *karu* 'black'. (1073(a))

1117. To. (also Ko.) *kab* 'sugar-cane' : Ta. *karumpu*. (1083; contrast To. Ko. *narb* 'muscle, vein' : Ta. *narampu*, Ma. *ñarampu*, *narampu*, 2364))

1118. To. *kök-* (*köky-*) '(buffalo) scratches itself against rock'? Ma. *ciraku*, *curaku* 'to grate'. (1305)

1119. To. *teg-* (*tegy-*) 'to fasten loin-cloth' : Ta. *ceruku* 'to insert'. (2285)

1120. To. *sō:d-* (< \**ce:r-nt-*), secondary stem of *sō:r-* 'to arrive', *sō:t-* (*sō:ty-*) 'to make to join with others' (< \**ce:rtt-*; 2312).

Also see examples 35, 238, and 239.

1121. To. (also Ko.) *pe-* (< \**peru-*) 'big' before a consonant (as in *pe notr* 'chief sacred place', *per-* before a vowel, *per wid*

'adult'), *pex-* (< \*peruk-, pexy-) 'to become stout, thick'. (3613)  
 1122. To. *magil* (< Ka. *maggal, maggil, maggul* 'side') 'slope  
 of hill', *max* 'slope, hillside' : Ta. *maruñku* 'side'. (3861)  
 1123. To. *pem* 'waist, hip' : Ta. *verin, ven, ven* 'back'. (4518)

33. 2.4. As has already been mentioned, the reflexes <sup>v</sup>*s* and <sup>v</sup>*ʂ* occur only in a small number of cases. In most of the instances, <sup>v</sup>*s* occurs before an original front vowel which has been lost or before or after (see 1135 below) a non-morphemic *t* (or *tt*) which does not come from the transitive suffix \**tt* (<sup>v</sup>*s* occurs before transitive \**tt*, see below). The alternation the *DED* entries 834(a), 1073 and 3613 unmistakably point to the second conditioning factor. There are certain exceptions to the conditionings proposed here but the explanation for this is not clear at the moment. The following are the cases

in which To. <sup>v</sup>*s* represents PDr. \**r*.

1124. To. <sup>v</sup>*asky* (< \**ariki*) 'rice' : Ta. *ari(ci)*, Ma. *ari*, Ka. *akki*. (178)

To. <sup>v</sup>*ust-* (< \**uritt-*, <sup>v</sup>*usty-*) 'to take off (ring, bangle, shirt or coat, sari)' : Ta. *uri* (-v-, -nt-) 'to peel (intr.)', (-pp-*tt*-) 'to strip off (as bark)'. (561)

<sup>v</sup>*ust-* (< \**urutt-*, <sup>v</sup>*usty-*) 'to appear, come into sight (star) rises' : Ta. *uru* 'to assume a form, appear'. (566)

1127. To. <sup>v</sup>*est* 'bull' : Ta. *erutu*. Ko. *et*. Ka. *ettu, eddu*. (698)

1128. To. <sup>v</sup>*os-* (< \**oru-*, variant of *wi:r-* / *o-* 'one' before *t* as

in *os<sup>v</sup> tal* 'half of cloak that contains pocket, half of cloak under which one sleeps', *os<sup>v</sup> tet* 'one handful'): (834a)

1129. To. *kastal* (< \**kari(t)tal*) 'darkness', *katal* 'id'. (in songs) : Ko. *katal(g)*, Ka. *kartale*, *kattal(e)*. (1073(b); this must be a loan from (Old) Kannada because of the *l* rather than *L*).

1130. To. *kō:st-* (< \**ke:rtt-*, *kō:sty-*) 'to lean against (tr.)', cf. *kō:r-* (*kō:θ-*) 'to lean against (intr.)': Ko. *ke:d-* (*ke:dy-*) 'o lean one's back against support'. (1674)

1131. To. *kosk* (< \**korik* 'heron' : Ta. *kuruku*, Ma. *kuriyan kuru*, (1767)

1132. To. *ni:sf-* (*ni:st-*) 'to become bruised' : Ta. *ñeri*, *neri* 'to break, be crushed'. (2387; in this the correspondence \**e*> To. *i:t* is problematical)

1133. To. *tas-*, variant of *to:r-* 'to give to 1st or 2nd person', Ta. *taru* (2526)

1134. To. *tesk* (< \**tiraykk*) 'loop, curve of horn', cf. *terf-* (*tert-*) 'to make a loop of cane' : Ta. *tirai* 'to roll as waves, contract', *tiraippu*, *tiraivu* 'wrinkling'. (2653)

1135. To. *nōts* 'blood' : Ta. *neytto:r*, Ka. *nettār(u)*. (3106)

1136. To. *pasty* 'wick' : Ta. *parutti* 'cotton'. (3280)

1137. To. *pō:sf-* (probably < \**pe:ri-*, *pō:st-*) 'to name', cf. *pō:r* 'name' : Ta. *peyar*, *pe:r* 'name'. (3612)

1138. To. <sup>v</sup>*pes tō:n* 'sp. bee' (<sup>v</sup>*pes-* is the variant of *pe-*, *per-* 'big') : Ta. <sup>v</sup>*perun-te:n* 'large-sized honey bee'. (3613)

1139. To. <sup>v</sup>*pesf-* (< \**peri-*, *pest-*) '(ghee or milk) solidifies': Ma. *piri* 'to coagulate (as milk)'. (3621)

1140. To. <sup>v</sup>*pas-*, variant of *po:r-* 'to come' : Ta. *varu*. (4311)

1141. To. <sup>v</sup>*pisky* (< \**viri(k)ki*) 'wild olive, *Olea bournei*' : Ko. *viky* 'olive'. (4446)

To. 2nd person plural pronominal ending <sup>v</sup>*ts* with the free variant <sup>v</sup>*s* < \**-i:r* (here the conditioning factor seems to be the preceding *t*, whatever its origin may be; cf. example 1135).

The stem alternants <sup>v</sup>*tas-* (2526) and <sup>v</sup>*pas-* (4311) occur only in the desiderative (suffix <sup>v</sup>*-se-*, <sup>v</sup>*tasepini* 'I would like to give <sup>v</sup>*pasepini* 'I would like to come'), the dubitative (suffix <sup>v</sup>*-s-*, <sup>v</sup>*tasplni* 'I may give', <sup>v</sup>*pasplni* 'I may come') and in the voluntative (suffix <sup>v</sup>*-k-*, <sup>v</sup>*taskin* 'I will give', <sup>v</sup>*taskim* 'we (excl.) will give', <sup>v</sup>*taskum* 'we (incl.) shall give', and similarly for the other verb; note the sandhi change *ss* → <sup>v</sup>*s*). The following front vowel in these seems to be responsible for the development of \**r* to <sup>v</sup>*s*; in the inclusive forms of the voluntative in which there is no front vowel the occurrence of <sup>v</sup>*s* must be due to analogy.

It must be noted that \*c or \*cc that is followed by \*i also develops into <sup>v</sup>s in Toda, cf. To. <sup>v</sup>usky 'top of tree, zenith': Ta. Ma. ucci 'crown of head' (496); To. <sup>v</sup>us 'excl. of dislike': Ka. is(si) (362) and To. <sup>v</sup>witos 'help' : Ta. otta:cai, Ka. otta:se (820; this word must be a loan because To. y corresponds to \*ay).

33. 2.5. Proto-Draavidian \*r develops into To. § when it occurs as the first member of a consonant cluster in environments other than those in which s occurs, that is, before an original non-front vowel. There are two cases in which § occurs in the word-final position (it is notable that in both the cases it is originally followed in the next syllable by a retroflex consonant that has been lost in Toda). As mentioned in 33. 2.4. above, \*r develops into § before the transitive \*tt (see examples 1143, 1147 and 1150).

The following are the cases in which To. § < \*r.

1142. To. o:ṣf- (*o:ṣt-*) 'to dahce (of Todas)' : Ta. a:r 'to shout'. (312)

1143. To. iṣt- (< \*iru-tt-, iṣty-) 'to seat, keep in a place', iṣk (< \*irukkay) 'life time', i:ṣk (< \*i;rkkay) 'dwelling, act of dwelling' : Ta, iru 'to be, exist', iruttu 'to cause to sit', irukkai 'sitting, seat, dwelling'. (407)

1144. To. i:ṣf-(i:ṣt-) 'to pull, drag' : Ta. i:r (461 or Ta. iļu, 427)

1145. To. iṣθa:ṣ (< \*iruntal) 'night-time' : Ta. iruntil 'charcoal', Ma. irunnal, Ka. iddal, ijjal. (2102)

1146. To. tuṣk 'man's curl' : Ka. surku, sukku, suñku, sokku 'a curl'. (2211)

1147. To. tiṣt- (tiṣty-) 'to correct crookedness (of stick)': Ta tiru-ttu 'to correct'. (2659)

1148. To. *nō:ṣf-* (*nō:ṣt-*) 'to measure the length of' : Ta. *ne:r* 'straightness'. (3126)

1149. To. *pīṣ a:s* (< \**a:lay* < Skt. *śa:la:*) 'hut to which woman goes after childbirth and stays until new moon' : Ta. *puruṭu* 'ceremonial pollution on account of childbirth'. (3519)

1150. To. *po:ṣt-* (< \**va:r-tt-*, *po:ṣty-*) 'to scoop with both hands into receptacle' : Ko. *vait-* 'to scoop (earth from hollow)', Ta. *va:ru* 'to scoop'. (4392)

1151. To. *peṣk* 'flying-fox' : Ta. *veruku* 'tom-cat'. (4520)

1152. To. *teṣ* (*t/θwīṛ*) 'ball (of food)' : Ko. *ter* 'lump of clay put on wheel to throw a pot', Ta. *tirał(ai)* 'round object', *tirai* 'roll (of betel leaves, etc)'. (2654; the Toda word is given with a query in *DEN*)

1153. To. *muṣk* (also *muk*) 'edge, corner' : Ta. *mukku* 'corner' (4012; to explain the sound *s* in Toda, this word may be connected with Ta. *murukku* 'to break in pieces', 4078))

1154. To. *ka:ṣtk* 'Pleiades' : Ta. *ka:rttikai* (< Skt., DBIA 96; in this word *s* is quite unexpected because it is followed by a non-transitive \**tt* which in turn is followed by \**i*).)

1155. To. *pīṣk* 'kidney' : Ta. *pirukkam* (< Skt., DBIA 272).

From the above discussion, it is clear that the reflexes *s* and *ṣ* mostly occur as the first member of consonant clusters the second member of them being one of the consonants *k*, *t* and *f* (and rarely *θ* in the case of *ṣ*). As noted by Emeneau (1958:57), PDr. \**l* has merged with \**r* in pre-Toda in such cases (see 37.5.5.)

33. 2.6. PDr. \**r* has been retained in Toda in the majority of the cases. It is normally retained in the word-final position (To. *ir* 'female buffalo' : Ta. *erumai* (699); To. *no:r* 'string made from bark' : Ta. *na:r* (3023); To. *pī:r* 'quarrel, fight' : Ta. *po:r* (3708)), before a word-final *y* which is from

\*i (To. *nary* 'jackal' ; Ta. *nari* (2981); To. *kary-* (*kars-*) 'to be singed' : Ta. *kari* (-v-, -nt-) 'to be charred' (1073(a)); To. *üry* 'sweat' : Ka. *urt* burning, flame' (565)) and before vowels and consonants other than those mentioned in 33.2.4 and .5 (To. *ärx-*, (*ärxy-*) 'to be subdued', *ark-* (*arky-*) 'to subdue' : Ta. *aruku arukku* (184); To. *narb* 'muscle, vein': Ta. *narampu* (2364); To. *urp* 'form, idol' : Ko. *urp* (566); To. *ko:rm* 'curry' : Ta. *ka:ram* 'pungency' (1227); To. *kwarg* 'monkey' : Ta. *kurañku* (1473), etc.). There are also cases in which \*r is retained before the consonants mentioned in 33. 2.5. and no explanation for this is at hand. e.g. To. *ark-* (*arky-*) 'to chip': Ta. *ari* 'to cut off' (175); To. *part-* (*party-*) 'to pray': Ta. *paracu* 'to praise' (3257; the t in the Toda word seems to be from \*c); To. *kerf-* (*kert-*) 'to scratch' : Ta. *cirai* 'to shave' (1305); To. *warf-* (*wart-*) 'to rub into paste' : Ta. *urai* (572)

### 33. 3. PDr \*r > Br. r, rr, φ

33. 3.1. According to Emeneau (1971:185-187), Br. *r* < \*r occurs in 20 items (see examples 30, 205, 252, 351 and 1018 while *rr* occurs in seven items; the conditioning is not clear from the meagre material.

Examples for Br. *rr* < \*r.

1156. Br. *xurruka:v* 'a snore' < \**kur-*. (1496)
1157. Br. *kurr-*, *kurre:ng-* 'to shrink from, keep back, withhold' < \**curuñk-*. (2213)
1158. Br. *curr-* 'to flow, gush' < \**co:r-* /\**cor-V-*. (2353)
1159. Br. *narr-* 'to flee' < \**nar-*. (2980)
1160. Br. *po:rr-* 'to hatch' < \**po:r-*. (3706)
1161. Br. *marr-* 'to obey', *marri:* 'tame' < \**mar-*. (3865)
1162. Br. *marra:m* 'shout, fame' < \**mor-/mur-*. (4076)

33. 3.2. In Brahui, *r* (< \**r* or \**l*) is lost before a consonant in inflection in both nouns and verbs, for example *di:r* 'water', pl. *di:-k* pl. oblique *di:-t-* and *baf-*, *bat-* the negative stems of *bann-/bar-* 'to come' are from \**kar-r-*, and \**bar-t-* (see for details, Emeneau 1962b:39, 1971:194-196). The word *de:* 'sun, time' (example 1(95) shows less of *r* even in the final position (this is probably analogical to pl. *de:k*). Regarding the conditioning for *r* or *rr*, Emeneau (1971:196) makes the following tentative general statement and notes many cases which go against it "... in verb stems, final \**r*, \**r* and \**l* are represented by *rr* after a short vowel, and *r* after a long vowel except that *r* occurs after a short vowel when the verb belongs to the *r/n* class." *rr* in the intervocalic and final positions is very rare but there are contrasts like *pir* 'rain' / *birr* 'wild, not tame' and *pir-* 'to swell' / *birr-* 'to separate out, select'.

It does not occur initially.

### 34. 1. \*-l(-)

34. 1.1. \*-l(-): -l(-) in all the languages except Kui (Winfield) usually -d- (but -l- in some other dialects) [but after a consonant *l* (see example 791). Br. *l* and *L* (voiceless), To. *s*, and *l*. Tu. *-l-*, *-r-*.

34. 1.2. In Kota, (*l*)*li* often changes to *j*, e.g. *puj* ‘tiger’ (<\**puli*, example 259), *neyj* ‘firesticks’ (<\**ñeli*, 2390), *eyj* ‘rat’ (<\**eli*, example 348) and *e:paj* ‘small wall-lizard’ (<\**palli* 3294).

34. 1.3. Tulu shows \**l* > *r* in cases like the following: *tare* ‘head’ (<\**talay*, example 791), *ire* ‘leaf’ (<\**ilay*, example 767), *moyeri* ‘hare’ (<\**mucal*, 4071), *mire* ‘woman’s breast’ (<\**mulay* 4081) *ka:rī* ‘leg’ (<\**ka:l*, example 145), *paru* ‘animal’s tooth’ (<\**pal*, example 27), *biru* ‘bow’ (<\**vil*, example 210), *pe:rī* ‘milk’ (<\**pa:l*, 3370) contrast *kallī* ‘stone’ (<\**kal*, 1091), *kalpu* ‘to learn’ (<\**kal*, 1090)

See examples 27, 145, 207, 210, 259, 336, 348, 352, 576, 577, 763, 791, 1013 and several others.

34. 1.4. In South Dravidian in the past stems, *l + nt* → \**ṇt* and *l + tt* → \**ṭṭ*, e.g. \**nil*(\**nīy!*-) 'to stand' (3043), but \**kaj*(\**kaṭṭ!*-) 'to learn' (1090; in this SDr. \**kal-* but CDr. \**kaṭ-* e.g. Te. *karacu*, Go. *kari*:-, Kui *gra:mb-*, Kol<sub>3</sub> *karp-*, etc.)

34. 1.5. In the case of Brahui, the reason for the divergent development is not clear from the meagre material, e.g.

*pa:L* 'milk' < \**pa:l* (3370):

*xo:l* 'womb' : Kur. *kull* 'belly' (1859)

*piL-* 'to squeeze' : Malt. *pilq-* (3437):

*xul-* 'to fear', *xuli:s* 'fear' : Ta. *kuluñku*" 'to quake with fear'. (1501)

While there are many nouns ending in *l*, there is no noun ending in a short vowel+*L*

### 34. 2. \*-ll-.

34. 2.1. \*-ll-: Ko. **Konda** Pe. **Mand.** Malt. -*l-*• To. -*ʂ-*; -*l-* (in loans). Kui -*d-, -l-*; others -*ll-*.

Examples:

1163. Ta. Ma. Ka. Ko<sub>d</sub>. *alla* 'is not that, not thus'. Ko. *ala*: Go. (Tr.) *hal, halle*: 'not'. Malt. -*l-* 'negative morpheme'. Br. *all-* base of past neg. tenses of *ann-* 'to be', *ala, alava*: 'certainly not'. (198).

1164. Ta. *nelli* 'emblic myrobalan, *Phyllanthus emblica*'. Ma. *nelli*. Ko. *nel bañ* (probably < Bad.) To. *niʂ koʂy*. Ka<sub>2</sub> *nelli*. Ko<sub>d</sub>. *nellike*. Tu. Te. *nelli*. Pa. *nella*: Go. *nalli*; (A) *nelli*:; Kon<sub>3</sub> *neli* 'tamarind'. Kui *neɖi*. Kuwi *lelli*. (3114 & 3115)

34. 3. PDr. \*-*l-*, \*-*ll-* > To. *s* (apico-alveolar sibilant with flattened body of tongue); *L* (voiceless alveolar lateral) and *l* (the last one occurs only in loans)

34. 3.1. Of the three Toda correspondences of this proto-sound, *L* occurs only as the final sound in a small group of

verb stems.<sup>1</sup> They are the following: *a:L-* (*a:f-*) 'stream goes dry' (< \**aral*, 346), *kon eL-* (*e:f-*) 'to long for (person, -k) *mu:n eL-* (*e:f-*) 'to like' (: Ta. *erī* 'to take pity', *ettu* 'to feel compassion', 733), *o:L-* (*ō:f-*) 'to be fat' (: Ta. Ma. *e:l* 'to be excessive, multiply' 776), *kaL-* (*ka:f-*) 'to learn' (: Ta. Ma. *kal*, 1090), *teL-* (*te:f-*) 'to wrap (garment) tightly round waist' (: Ta. *taru* (*tarr-*) 'to wear tightly as a cloth', 2564), *teL-* (*te:f-*) 'to pay (fine, debt)' (: Ka. *teru* (*tett-*) 'to pay', 2833), *twi:L-* (*twi:f-*) 'to be defeated' (: Ta. Ma. *to:l* (*to:rr-*), 2936; note *swi:l-* (*swi:t-*) 'to be defeated' which is from Badaga, *parL* (*part-*) 'tree) dries up, dies', *peL-* (*pet-*) 'buffalo) goes dry' (: Ta. Ma. *varal* (*varanī-*) 'to become dry', *vattu* (*vatti-*) 'to grow dry', 4355) and *keL-* (*ket-*) 'to hesitate'.

These verb stems contrast with those ending in *s* and *t*. There are only three verb stems ending in *s*, namely, *kis-* (*ki:d-*) 'to be able' (: Ta. *kil* (*kitr-*), 1307), *na:s-* (*na:sy-*) 'to play (a game)' (: Ko. *nayl-* (*nalc-*) 'to play', 2988) and *üs-* (*üsy-*) 'to long for' (: Ta. *ollu* 'to agree', 846). The following are the verb stems that end in *t*: *kwal-* (*kwalθ-*) 'to become emaciated' (: Ta. *kulai* (-nt-) 'to tremble, shake', 1501), *nil-* (*ni:d-*) 'to stand' (: Ta. *nil* (*nir-*), 3043), *no:l-* (*no:d-*) 'to get wet in rain' (: Ka. *na:n* (*na:nd-*), 3006), *sal-* (*sad-*) 'to belong to' (: Ka. *sal* (*sand-*) 'to enter, engage in', 2286), *swi:l-* (*swi:t-*) 'to be defeated' (< Badaga, cf. Ka. *so:l(u)* (*so:t-/so:lt-*), 2936), *twi:l-* (*twi:d-*) 'to be foreseen' (: Ta. *to:nru* (*to:nri-*) 'to be visible', 2942), *tel-* (*te:d-*) 'to

<sup>1</sup>. The word for 'forty' is given as *nal poθ* in DED 3024 but as *naLpoθ* in DED 3236 and in the Toda index. The former might be the correct one since the voiceless *L* does not otherwise occur in words other than verb stems. But Emeneau informs me that *naLpoθ* as given in DED 3236 is the correct form and that the other one is a misprint.

recover slowly after swoon' (: Ta. *te:ru* (*te:ri-*) 'to be clarified', 2856) and *twal-* (*twalθ-*) 'to be settled' (: Ta. *tolai* (-*nt-*) 'to be over', 2900).

34. 3.2. It must be noted that all the verb stems ending in *L* have the secondary stem ending in *t* < PDr. \**tt* (or \**rr*) while those ending in *s* or *l* have the secondary stem ending in some other consonant. Since there is no other conditioning this must be the conditioning for the development of \**l* to To. *L*. The secondary stem in Toda-Kota, which is the basis for the formation of the past tense as well of the present tense is the past stem in origin (Emeneau 1957:43; 1967). Because of its wide-spread use, there is a possibility for it to make the primary stem undergo change. This is what seems to have happened in the case of verb stems that are under consideration. That is, for example, the secondary stem *kat-* (< \**kat:t-*) which ends in the voiceless *t* caused the primary stem \**kal* to change its final *l* into the voiceless *L*. In verb stems like *eL-*, *teL-* and *peL-* there was no \**l* originally as evidenced by the other languages. Therefore, these must be considered as analogical creations on the basis of the corresponding secondary stems i.e., for example.

*kaL-* ; *kat-* :: *X* : *teL-*.

On the basis of the analogy, *teL-* has been created in the place of the erstwhile \**ter-*.

34. 3.3. Regarding the correspondence \**l* (also \**ll*) : To. *s* / *l*, there does not seem to be any phonological conditioning for the two developments. This will be clear from pairs like the following.

<i>twi:s</i> 'skin' (: Ta. <i>to:l</i> , 2937) : <i>ko:l</i> 'leg, foot' (Ta. <i>ka:l</i> , 1238)
<i>twas</i> 'grove' (: Ta. <i>co:lai</i> , 2357) : <i>wa:l</i> 'writing' (: Ta. <i>o:lai</i> 'palm leaf', 903)

34. 3.4. In a number of cases, corresponding to one original word, there are two words, one with *l* and the other with *s*, there normally being a slight difference in meaning between the two words. Examples are:

*kas* 'stone', *kal* ' milestone, bead' < \**kal* (1091)  
*kɔɪs* 'excrement', *ko:l* 'leg, foot' < \**ka:l* (1238)  
*ki:s* 'handle', *ku:l* 'hinge of box' < \**ki:l* (1346)  
*nesn* 'ground' (in songs), *neln* 'ground' < \**nilan* (3044)  
*ne:s* 'shade, relics', *ne:l poly* 'house in which relics are  
 kept' < \**nilal* (3046)  
*pe:sy* 'stone wall of pen', *pe:ly* 'fence' < \**ye:li* (4556)

*nīs* ‘a place’ (< \*nilay), *nelp* ‘site of house’ (< \*nilaypp) (3043)

*pots* ‘milk’, *po:l (fi:r)* ‘(stomach full of) milk’ < \*pa:l (3370)

*tas* ‘superior division of *ti*: diary’, *taṣm* ‘top’, *tal* head, end, *talp* ‘tip’ < \*talay (2529)

*ūs-* ‘to long for’, *wal-* ‘to be bad’ < \*oll- (846)

*pūsy*, *ūly* (< Badaga) ‘tiger’ < \*puli (3532)

*kwasm* ‘genus, sacred name’, *kwalm* ‘thing’ < Skt. *kulam* (DBIA 120)

34. 3.5. Since there is no phonological conditioning for the two developments, we must conclude that words with *s* are native Toda forms while those with *l* are borrowings from one of the neighbouring languages, i.e. Tamil, Malaya:lam or Kannada. There are two more points that support this conclusion. Firstly, there are many disyllabic nouns ending in (or containing) *l* in Toda (see examples 100–112). Since Toda, like Kota, has a great tendency to lose the original short vowels (other than \*i) in non-initial syllables, such words may not be native Toda words.<sup>2</sup> Secondly, in some words with *l* there are also other indications to show that they are loan-words. Thus, *anil* ‘squirrel’ (1911) in addition to being a disyllabic word shows the absence of the change \*a>o. *petil (eg)* ‘betel (leaf)’ (4539) is also disyllabic and, in addition, it shows the change \*i>t which is unexpected; this change indicates that it is a loan from modern Tamil (moreover, the article is not native to the Nilgiris). The loss

<sup>2</sup>. The disyllabic words like *nesof* ‘moonlight’ (3113), *pasof* ‘jack-fruit’ (3290), *paso:r* ‘Jamaica switch sorrel, *Dedonea viscosa*’ (4437) and *konof* ‘dream’ (1184) in which \*l changes to s are obviously not loans in Toda; the second vowel in them was originally long.

of *p-* in *ul* 'grass' (3528) and *ūly* 'tiger' (3532) indicates that they are from Badaga. Finally, words with *s-* like *sal-* 'to belong to', *salf* 'expenses' (2286), *si:ly* 'a cloak' (2161), *so:l* 'furrow' (2038) and *so:lm* 'assets and liabilities' (2039) are clearly loans since they fail to show the change *\*c->t-*.

The verb stems ending in *l* instead of the expected *s* must be loans; however, *no:l-*, *twī:l-* and *te:l-* owe their *l* to analogy since there was no *l* originally in them as evidenced by the other languages. As suggested by Emeneau, it is possible to consider the voicing of the *l* in these and in *nil-* (*nīd-*) 'to stand' as analogical to the corresponding past stems ending in the voiced *d* and therefore they may be native Toda words.

It does not occur initially.

**35. 1. \*-*l*(-)**

35. 1.1. \*-*l*(-): Ta. Ma. Ko. Ka. Ko<sup>d</sup> Nk. *l*. To. *L*, *l* (in loans). Tu. (B) *l*, (C) *l*. Te. Kol. Nk (Ch.) Pa. Ga. Kur. Malt. Go. Konda Pe. Mand. Kuwi *r*. Kui *l*, *d*, C] *l*. Br.*l*, *L*.

34. 1.2. In Telugu, the inscriptive evidence shows that *l* was preserved upto the 10th century.

34. 1.3. Outside south Dravidian, the Naikri dialect of Kolami alone preserves \**l* but after *i*: and *e*:, it is changed to *l* (cf. Emeneau 1955:149; e.g. *irał*: Pa. *ira:l* ‘two women’).

34. 1.4. In Gondi, single *l* > *r* but double \**ll* > *ll*. Burrow and Bhattacharya state (1960:75-76) “... the Hill-Maria dialect as spoken in the remoter regions on the borders of Bastar and Chanda, preserves -*ll*- . We interviewed for a short time a few Marias coming from the village of Dhobi situated in this region and received from them such forms as *kalle* ‘thief’ and *kallu* ‘liquor’. It is also of interest to note that the retroflex *n* is also preserved in part of the Hill-Maria region, e.g. *no:nə*

(Orcha) ‘rope’. When \**l* comes to the initial position through metathesis, it yields *r* in the northern and western dialects but *l* in the south-eastern dialect (see p. 231).

34. 1.5. In Brahui, \**l* first merged with \**l* and then *l* later split into *l* and *L* under conditions not yet known, *te:L* ‘scorpion’ < \**te:l* (example 466) has *L* but *mili:* ‘marrow, brain’, < \**mu:l-ay* (4146) has *l* (see 34. 1.5).

Examples:

1165. Ta. *eŋku*, *elu*, *uḷiyam* ‘a bear’; *iḷai* ‘Indian black bear’ Te. *elūgu*, *eluvu* ‘a bear’. Pa. *ili*. Ga. (Oll.) *ilij*. (S) *illij*. Go. *aṛja:l* (M. A) *erj*. Konda (S and E) *olzu*, (N and W) *orzu*. Ku i *oli*, *oḍi*. Kuwi (Su), *o'ri*. Malt. *eju*. (729)

1166. Ta. *kał* (*kaṭt-*) ‘to steal’; *kał*, [*kałavu*, *kałlam*, *kałla*] ‘stealing’; *kałan* ‘theif’, *kałli* ‘female theif’. Ma. *kał* (*kaṭt-*) ‘to steal’; *kałavu*, *kałlam* ‘theft’; *kałavan*, *kałan* ‘thief’, fem. *kałatti*. Ko. *kały-* (*kałd-*) ‘to steal’; n. trickiness’; *kały* ‘thief’; fem. *kaył*. To. *koł-* (*kołd-*) ‘to steal’; *koły* ‘thief’; *ko ly* ‘petty thief’. Ka. *kał* (*kałd-*) ‘to steal’; n. ‘stealing’; *kałavu*, *kałahu*, *kała* ‘theft’ *kałla*, *kała* ‘thief, rogue’; *kałati*, *kałle* ‘female thief’. Kođ. *kał-* (*kaṭt-*) ‘to steal’; *kałłe* ‘thief’, fem. *kałli*. Tu. *kałavu* ‘theft’ *kały* ‘thief’ Te. *kalla* ‘falsehood’. Go. *kal-* (*kalt-*) ‘to steal’; *kalle:*, (Hill maria) *kałle* ‘thief’. Manđ. *kay-* (-*t*-) ‘to steal’. Kuwi (S) *kalli* *mleha/mneha* ‘rogue, scoundrel’. Kur. *xar-* (*xadd-*) ‘to steal’; *xalb*, *khaḍka*: ‘theft’; *xalbas* ‘thief’. Malt. *qal-* (*qađ-*) ‘to rob, steal’; *qalwe*, *qalwi* ‘thief’. Br. *xall-* ‘to lift (cattle)’; *kalp* ‘deceitful’, (1156)

1167. Ta. *miłaku* ‘black pepper, *Piper migrum*’. Ma. *miłaku*, *mułaku*. Ko. *mełg* ‘chilli’. To. (*mōLx* ‘pepper’. Ka. *meṇasu*, *mełasu*, *mołasu*. Kođ. *mału* ‘chillies’. Tu. *muñuci*, *muñci* ‘pepper, chilli’. (3986)

See also examples 10, 256, 466, 615, 778, 784, 1009 and others.

## 35. 2. \*-ll-.

35. 2.1. \*-ll-: Ta. Ma. Ka. Kod Tu. -ll-. Ko. -l-. To. -L-, Te.<sup>1</sup> Kol. Nk. Nk. (Ch.) Pa. Ga. Go. Kuwi. Kur. Br. -ll-. Konda Pe. Mand. Malt. -l-. Kui -d-.

Examples:

1168. Ta. *tallai* 'mother' Ma. *tallā* Te. *talli*. Pa. *tal*: Go. (Mu.) *tallur* 'mother of animals or birds', *tallur pe:n* 'a female deity', (Ma.) *talloG* 'mother, female of animals'; (Tr. W: Ph.) *ta:li*: 'cow', (G) *ta:li*, *ta:la*: Konda *tari* 'female of animals'; *tali* 'mother' (invocatory); adj. 'female (prefixed to certain animal names)'. Pe. *tari* 'mother'. Kui. *tadi* 'mother'; *tali* 'female bird or animal, hen', Kuwi (S) *talli* 'mother'. (2560)

1169. Ta. *pillai* 'child, young of many animals'. Ma. *pilla*? Ko. *payl* 'young grain plant (not paddy), child'. To. *peL xo:f-* (*xo:t-*) 'to be married to a man'. Ka. *pille*, *pilla* 'child, young of any animal'. Kod *palle* 'female of various wild animals (also dog, horse)'. Tu. *pille*, *pulle*, *pulli* 'grand-child'. Te. *pilla* 'child, girl, young of animal', *pilaka*, *piluka* 'young shoot'. Kol. Nk. *pilla* 'girl'. Go. (L) *pila*: 'child'. Konda *pila*. Pe. *pilka* 'young shoot of tree'. Kur. *pello*: 'female child'; *pell* 'maidservant'. Malt. *peli* 'woman'; *pelo* 'female (of plants)' Br. *pillosta* 'small child, orphan'. (3449; shift the Kuwi entries in *DEDS* to 3608(a) since the basic word *pelli* 'marriage' in

<sup>1</sup> Although in Telugu, original \*ll becomes ll, ll later developed from the combinations d/r/l + l; this is very common in the formation of noun plurals with the suffix -lu(< \*l) e.g., *ko:di-lu>ko:llu* 'fowls', *u:ru-lu>u:llu* 'villages', *illu-lu>illu* 'houses', *mullu-lu>mulu* 'thorns', *ni:ru-lu>ni:llu* 'water' also cf. *vedalu>velli* 'to go' and *vend(i)li>pelli* 'marriage'. In the plural formation, the original retroflex nature of the suffix seems to be responsible for this. In the sub-standard dialect, ll>ll, e.g. *ni:llu* 'water, *pelli* 'marriage'.

these is a loan from substandard Te. *pelli*, (standard) *pelli* < Old *pend(i)li* 'marriage').

See also example 1166

### 35. 3. PDr. *!\*(!)* > To. *L*, *l*.

35. 3.1. In Toda, *L* (voiceless retroflex lateral) is the regular development of *\*!* or *\*ll*, excepting at the end of verb bases *l* occurs only in loans (P.S. Subrahmanyam 1977c).

The following pairs will show that there is no phonological conditioning for the two correspondences:

*keL* 'economic partnership': *el* 'young'; *elk* 'time of youth'

(: Ta. *kiłai* 'family'; 1678) (:Ta. *iłai*, Ka *ełaku*, 436)

*peL* (*xɔ:f*) 'to be married' (*kwiły* 'loot' (: Ta. *kołłai*

'to a man' (:Ta. *piłłai*, 'plunder', 1788)

'child', 3449)

*paL* 'valley' (: Ma. *pałła* 'cavity', 3307) : *połm* 'a bamboo vessel' (: Ta. *vallam* 'a dish', 4350)

*poLy* 'sacred diary' (: Ta. *pałli* 'hamlet, hermitage', 3309)

: *koły* 'petty thief' (:Ta. *kałli* 'female thief', 1156)

*koŁn* 'threshing floor' (: Ta. *kałan*; 1160) : *kołn* 'thief' (: Ta. *kallan*, 1156)

*aL-* 'to measure' (: Ta. *ała*, 252): *tol-* 'to push' (Ta. *tałlu*, 2559)

*uLy* 'branding iron' (: Ta. *uli* 'chisel', 601): *ku:ly* 'stud bull' (: Ta. *kułli*, 1597)

*i:L* 'night' (: Ta. *iruł* 'darkness', 2102): *pi:l-* 'to tumble over or down' (: Ta. *pirał*, *pural*, 3516)

*mōŁx* 'pepper' (: Ta. *miłaku*, 3986) : *mułx-*, *mu:x-* 'to be destroyed' (: Ta. *mułku* 'to sink', 4096)

- *piL* 'bird' (: Ta. *pul*, 3544) : *muL* 'digging-fork' (: Ta. *mul*,  
4098)

*no:L* 'day' (: Ta. *na:l*, 3025) : *o:l* 'coolie' (: Ta. *a:l* 'man'  
342 (a))

*pü:L* 'Ilex wightiana' (: Bad. *huruLu*, 3521) : *u:l* 'ball (of  
butter, etc.)' (: Ta. *uruai*, 571(a))

*töL* 'flea' (: Ta. *cellu*, 2296) : *sol* 'hindrance' (: Ta. *callu*,  
1995)

35. 3.2. There are a number of pairs in Toda, one word in each with *L* and the other with *l* and these correspond to a single original word (with \*!). The following are the examples.

<i>o:L</i> 'man, Toda', <i>o:l</i> 'coolie'	< * <i>ail</i> (342(a))
<i>miL</i> , <i>mil</i> 'shoot of plant'	< * <i>muLai</i> (4100)
<i>muL</i> 'thorn', <i>mul</i> 'digging-fork'	< * <i>mul</i> (4098)
<i>paL</i> 'ring at head of churning stick', <i>pal</i> 'circle, bangle'	< * <i>valay</i> (4348)
<i>peL</i> , <i>pel</i> 'crop'	< * <i>vilay</i> (4464)
<i>tiL</i> : 'month', <i>tigil</i> 'moon'	< * <i>tinkal</i> (2626)
<i>toLy-</i> 'to sprinkle', <i>tolb-</i> '(liquid) slops over'	< * <i>tuli</i> , * <i>tulump</i> .
	(2764)
<i>tüLy</i> 'clear', <i>tüly-</i> 'to become clear'	< * <i>telij</i> . (2825)
<i>wiLt</i> , <i>wily</i> 'good'	< * <i>oli(tt)</i> (855)

35. 3.3. The absence of any phonological conditioning for the correspondences of PDr. \*! (or \*!!) : To. *L*, *l* coupled with the presence of paired words with *L* and *l* forces us to conclude that *L* is the regular Toda reflex and that words with *l* are borrowings which should have entered into the language after the completion of this change. M. B. Emeneau

(1958:55) has already identified words that contain ! corresponding to PDr. \**l* as borrowings, for example, *kwalp* 'fat' (: Ta. *koluppu*, 1784), *poly* 'way to do something' (: Ta. *vali* 'way', 4335) and *o:lm* 'depth' (: Ta. *a:lam*, 338). *tüLy* 'deep pool' (: Ta. *culi*, 2223(a)),<sup>2</sup> *miL* 'good points in argument (in assembly)' (: Ta. *molli* 'word, language', 4092) and *meLk* 'cud' (: Ta. *meluku* 'wax, gum', 4169) show To. *L*: PDr. \**l*; these seem to have been borrowed by Toda (from either Tamil or Kannada) before the operation of the change \**l* > To. *L*.

In a few words with ! like the following, there are also other indications that they are borrowings (the presence of initial *s*- or the base being disyllabic but not ending in *y*): *kubil* (*ko:y*) 'pumpkin' (1455), *muxul* 'ridge of roof' (: Ma. *mukal*, 4002), *odyo:lm* 'sign' (79), *tigi!* 'moon' (2626), *sol* 'hindrance' (1995) and *swi:lm* 'maize' (2359).<sup>3</sup>

**35. 3.4.** It is worth noting that verb stems ending in *L* have the secondary stem ending in a voiceless consonant while those ending in ! have the secondary stem ending in a voiced consonant: Four verbs end in *L* while thirteen end in !. Three verbs ending in *L* have the secondary stem ending in an additional *θ* or *t* while the fourth one, i.e. *ke:L-* 'to hear' (1677) has the secondary stem *ke:t-*; *aL-* (*aLθ-*) 'to measure'

<sup>2</sup>. This word seems to have entered Toda very early, i.e. before the operation of the change \**c-* > *t-* and \**l* > *L*.

<sup>3</sup>. *o:püLy-* 'to yawn' (cf. Ka. *a:kulisu*, *a:gulisu*, 333) must have been borrowed by Toda before the change of \**l* to *L*. The promiscuous correspondence PDr. *l*: To. *L* occurs in a few cases like the following: *agel* 'buttocks and thighs' (: Ko. *algaly* 'hindquarters', 214), *eLf* 'bone' (Ko. *elv*, 714), *kwe:L* 'tube, Kota clarinet' (: Ko. *korl*, 1511), *wirL* 'chest of body, desire' (: Ta. *utal*, 501) and *pe:L* 'finger, toe' (: Ta. Ma. *viral*, Ka. *beral*, also *beral*, 4436). We can explain the correspondence in the last two words but not in the others.

(252), *paL-* (*paLθ-*) 'to bend' (4349) and *peL-* (*peLθ-*) 'food plants) grow', (*peLt-*) 'to grow (tr.)' (4464). Many of the verbs that end in *l* have the secondary stem with *d* (< \**n!*) in the place of *l*, e.g. *u:l-* (*u:d-*) 'to roll' (57.), *o:l-* (*o:d-*) 'to own (buffaloes), rule', (341), *kwil-* (*kwid-*) 'to carry (corpse)' (1788), *pī:l-* (*pī:d-*) 'to tumble over or down' (3516), *pe:l-* (*pe:d-*) '(buffaloes) are frightened' (4519) and *ni:l-* (*ni:d-*) 'to be stretched out straight (rope)' (3059). All such verbs may not be loanwords since it is possible that under the influence of the secondary stem which ends in a voiced consonant either the *l* did not change to the voiceless *L* or *l* might have replaced *L* if the change had taken place earlier. In *nō:l-* (*nō:d-*) 'to make rope of bark' (: Ta. *ñā:n* 'string, cord', 2369) and *pu:l-* (*pu:d-*) 'to wear around neck' (: Ta. *pu:n* (*pu:nt-*), 3577) *l* appears only in Toda and it is due to analogy.

The verb *kol-* (*kold-*) 'to steal' (and the words derived from it, namely, *koln* 'thief', *koly* 'petty thief', 1156) seem to be borrowings from Ka. *kal* (*kałd-*); if it were a native word, the secondary stem should have been *koł-* (cf. Ta. Ma. *kal* (*kałł-*)) as in *ke:L-* (*ke:t-*) 'to hear' (1677) and, moreover, it would have contained *L* rather than *l*. The secondary stem *kwild-* of *kwil-* 'to hatch' (1524) indicates that it is a loanword from Badaga.

*L* is the regular Toda reflex for PDr. \**l* (single or double). All words that show *l* are loanwords in Toda. It is, however, possible that all verb stems ending in *l* may not be loanwords; the final *l* of two verb stems is analogical.

The identification of Toda words with *l* and *l* as loans has important consequences in determining the relative chronology of certain changes. These words have entered the Toda language before the operation of the following changes:

the several changes in the original vocalic system (described in Emeneau 1970a:36-46), the change \*v- > To. p-, the loss of \*l and \*r in contractions (see *DED* 4096, 3516 and 571 for examples) and the loss of -ay. On the other hand, the change \*c->To. t- seems to have been completed before the time of borrowing words with l or ! since in most of these an initial s- remains unchanged.<sup>4</sup>

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<sup>4</sup>. If *tui!-* (*tuid-*) 'to be rolled up' (2211), 'to pull legs close to body (e.g. while sleeping)' (2213), is considered as a borrowing, then it would be the sole exception to this statement.

## \*V.

No language contains words with the initial \*v- followed by the back vowels (*u, u:, o, o:*) but words beginning with a back vowel optionally have the on-glide *w*.

### 36. 1. \*v- and -v-.

36. 1.1. \*v-, -v-: To. *p-*, *-f-*. Ka. Kod. *b-*, *-v-*. Tu. *b-*, *-b-*, *-v-*. Kur. *b-*, *-b-*, *-y-*. Malt. *b-*, *-w-*. Br. *b-*, *-f-*, *-v-*. In the remaining languages *v* is the reflex in both positions (for Gondi, Trench writes *w* and for Kuwi, Shulze writes *w-* and Fitzgerald *vw-*).

For initial \*v-, see examples 11, 12, 30, 31, 210, 468, 623, 624, 767, 802, 803, 804 and others.

For intervocalic \*-v-, see examples 7, 350, 617, 618, 765, 782, 790 and others.

36. 1.2. In Kannada, the change \*v->*b-* is attested in inscriptions from the earliest times even in loans from Sanskrit (e.g. *be:gam* 'speed, quickly' < Skt. *vega-*) although upto the 12th century forms with *v-* also occur (see Narasimhia 1941:52-55). In later Kannada, *v* after *r* changed to *b*, as in modern *obbanu* 'one man' < Old *orvvan*, *o:rvvan*; *ibbaru* 'two

persons' < Old *irvar*. In Old literature, *v-* is retained when the word occurs as a second member of compounds though it has changed to *b-* otherwise, e.g. *mara-vil* 'bow made of wood' (but *bil* 'bow'), *kolli-vi:su* 'to wave fire brand' (but *bi:su* 'to wave'), *ugur-vasit* 'the nail and the belly' (but *basit* 'stomach'), *to:l-vale* 'bangle of the hand' (but *bale* 'bangle')—these examples are from *Pampa Bha:rata*, see Ramachandra Rao 1972:37-38). This change must have spread to Tu<sub>lu</sub> and Ko<sub>ḍagu</sub> (and to a dialect of Malayalam) from Kannada; it cannot be a shared innovation among these because Tu<sub>lu</sub> and Ko<sub>ḍagu</sub> are not closely related to Kannada.

36. 1.3. In Telugu, there are few cases of \**v-* > *b-*, e.g. *bratuku*, *braduku* 'to live' (example 803). Old Te. *va-* in the spoken language often changes to (*w)o-, e.g. *vaccu* > *occu* 'to come; *vadāku* > *oñuku* 'to shiver', *vadalu* > *odulu* 'to leave, be loose', *valadu* > *oddu* 'it is not necessary', *vañgu* > *ongu* 'to bend', etc. This change is absent in words of the type CVCV, e.g. *vasa* 'sweet flag', *vala* 'net', *vāri* 'paddy' (but *vadlu* > *odlu* '(grains of) paddy'), *vada-ga:li* 'the hot or land wind' and also in words in which the second syllable contains *r*, e.g. *varusa* > *varasa* 'row, line', *varada* > *varada* 'flood'. In the Telangana dialect initial *v-* is dropped, e.g. *va:na* > *a:na* 'rain', *vaccu* > *accu* 'to come'. Dropping of the initial *v-* before a front vowel is common in the substandard dialects all over the area, e.g. *vinu* > *inu* 'to hear, listen', *vi:pu* > *i:pu* 'back' *vi:du* > *i:du* 'this man', *venuka* > *enaka* 'behind', *ve:ru* > *e:ru* 'root'; this occurs also in the following pronouns: *va:du* > *a:du* 'that man', *va:llu* > *a:llu* 'those people', *va:ru* > *a:ru* 'those people, that man (honorific)'.*

36. 1.4. The change \**v-* > *b-* in the North Dravidian languages might have been induced by a similar change in the neighbouring Indo-Aryan languages; it is at present difficult

to say whether this change operated before the separation of Brahui and Kuγux-Malto or after (see Emeneau 1962b:62).

36. 1.5. Note that the change \*-v- > Br. -f- is commonly seen in the transitive-causative suffix -(i)f-<\*-vi-, e.g. *bar-if-* 'to cause to come' (: Ta. *varu-vi-*, Te. *ra:vincu, rappincu*), *kas-f-* 'to kill' (: Te. *cam-pu*); also cf. *o:fk* 'they' <\*uv- 'they (neut. intermediary)'.

### 37.1. Phonetic value and reflexes.

37.1.1. It is a retroflex voiced fricative and as a retroflex, it does not occur in the initial position but in the Telugu-Kuwi subgroup its reflexes come to the initial position through metathesis (early Telugu inscriptions contain a few words with *l* in the initial position).<sup>1</sup> J.R. Firth (in the 4th edition of

<sup>1</sup>. Emeneau (1958:51) notes that, in Malayalam, it is pronounced as a continuant with strong friction. He remarks that the description of the corresponding Tamil sound as a 'higher apical vibrant' in opposition to *r*, a 'lower apical

vibrant' (by Oldrich Švarny and Kamil Zvelebil) (vibrant = trill) "seems peculiarly difficult to accept". See also footnote 5 (p. 427) for other descriptions of the sound.

Different symbols are used for its transcription by different authors: *γ* is used by Burrow and Emeneau (*DED(S)* and other works), *z* by Ramaswami Aiyar (1938) and Krishnamurti (1958b and subsequent works only in writing the reconstructed forms), *l* by Narasimhia, *l̪* by Tamil lexicon, P.S. Subrahmanyam Sastri, L.V. Ramaswami Aiyar and Krishnamurti (1961), *ɭ* by A.C. Sekhar and G.S. Gai and *r̪* by Zvelebil and Pfeiffer. As remarked by Emeneau (*loc. cit.*) it is futile to argue which

A.H. Arden's *Grammar of Common Tamil*, 1934), described *l* of Tamil as follows: "a frictionless continuant having an obscure unrounded back quality, 'l' is made by drawing back the whole tongue and spreading the blade laterally, making it thick, short and blunt, so to speak, so that it approaches the middle of the hard palate. The result is a very retracted liquid sort of *r*-sound." Like *r*, it is never doubled.

37. 1.2. \**l*: Ta. *l* (many modern dialects *l*, northern dialect *y*). Ma. *l*. Ko. *y* (finally),  $\phi$  (before *g* or *k*), *r* (before *l*), *r* (*l* in loans).<sup>a</sup> To \**r* (>*s*, *s*; before *t*, *k* or *f*), *w* (finally),  $\phi$  (intervocally), *d*, *r*, *y* (*l*, *L* in loans). Ka. *l* > *l* [V, *r* [C. Ko $\phi$ . *y* (between *a* and \**i*), *l* (intervocally),  $\phi$  [C. Tu. (B) *l*, (C) *r*. Te. *l* > C]*r*, *d* (intervocally and in the initial position, in the latter position, *d*-> *d*-). Kol. Nk, *r*. Nk(Ch.) *y*,  $\phi$ . Pa. *r*. Ga. (Oll.) *r*, (S) *d*. Go. Konda Pe. Mand. Kui Kuwi *r*. Kur. Malt.  $\phi$  (commonest), *r*, *d*, *r*. Br. *r*, *rr*, *r*,  $\phi$ .

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symbol is correct. *l* is used in the present work mainly because of convenience in typing and printing. As pointed out by Burrow (1968b) Krishnamurti's practice of writing *z* for this sound in the reconstructed forms in order to distinguish it from the corresponding sound in Tamil-Malayalam and Kannada (this reason was stated by Krishnamurti) has little justification since there is no evidence that the concerned proto-sound is phonetically different from the corresponding sound in Tamil-Malayalam.

<sup>a</sup>. DED (p. xii) lists *g* as one of the Kota correspondences. A closer study of the concerned cases reveals that *g* is part of the derivative and \**l* is lost before it, see 37. 4.4.

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The following table shows the total number of reflexes of this protosound and their distribution in the languages.

<i>l</i>	<i>b</i>	<i>v</i>	<i>d</i>	<i>r</i>	<i>y</i>	<i>ɸ</i>	<i>w</i>
Ta.	Ta.(later)	Ko.	Te. V-V.	Pre-To.	Ta.	Ko.	To.
Ma.	Iru <sup>2</sup> a	To.	#](>d)	[To. s,ʂ]	(dail.)	Nk(Ch.)	
Old Ka <sup>2</sup>	adaga	Pa.	Ga.(S)	Tu.(C)	Ko.	Kur.	
	Kod	Ga.	(011.)	Te. C]	Kol.	Malt.	
Te. (ins-	Tu. (B)	Go.	To.	NK.	Nk(Ch.)	Br.	
crip.)	(Ko.)	Konda		Br.	Iru <sup>2</sup> a	Iru <sup>2</sup> a	
	(To.)	Pe.		(also rr)	Badaga	Badaga	
		Mand.					
		Kui					
		Kuwi <sup>3</sup>					
		Kur.					
		Malt.					
		Br					

Table 7. Reflexes of Proto-Dravidian \**l*

<sup>3</sup>. Burrow and Bhattacharya (1963:234) have pointed out that in Kuwi *y* is the regular reflex of \**l* and that the transcription of this sound with *r/l* in the earlier books is misleading. "Our investigations showed quite a different state of affairs, namely that the said phoneme (i.e. \**l*) regularly appears as *r*, which is the same treatment as that found in Kui, Pengo, Konda, Gondi."

\*l

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37. 1.3.ve Pa. Ga. (Oll.) *r*, Ga. (S) *d* and Kui (but not Kuvi) *r* represent PDr. \*l alone and no other Proto-sound, unlike the corresponding sounds in the other languages.<sup>4</sup> In other words, PDr. \*l has not merged with any other sound in Parji and Gadba although it has undergone some phonetic modification (the exact phonetic value of Pa. *r* is not yet clear). Note that To. *r* is a retroflex voiced trill but in the other languages *r* represents a retroflex voiced flap.

37. 1.4. Krishnamurti (1958b) made a very general survey of the developments of PDr \*l in the daughter languages; that paper supercedes the studies on this subject by Caldwell, Ramaswami Aiyar (1935) and others. As we shall see in the following sections, several scholars have later made more precise studies on the development of this sound in some of the languages.

#### Examples:

1170. Ta. Ma. *pulu* 'worm, maggot'; (-*tt-*) 'to breed worms'. Ko. *pu*: 'worm'. To. *puf*; *u*: (< Ba<sup>g</sup>aga *h-ii:*). Ka. *pulu*, *puja*, *hulu*; *puli* 'to be eaten or infected by worms': *puluku* 'that is eaten by vermin, ulcer, sore'; *purcu* 'ruin, wickedness'. Kod. *pulu* 'worm'; *pung-* (*pungi-*) (meat) becomes highly decomposed, (sore) festers a little'. Tu. (B) *pu*li**, (C) *puri* 'worm, moth'; *pura*, *puru* 'snail'; *purku-*, *purngu-* 'to rot, decay'. Te *pur(u)gu*, *pur(u)vu*, *pruvvu* 'worm'; *p(r)uccu* 'to rot'; *p(r)uppi* 'rottenness'. Kol. Nk. Nk (Ch.) *purre* 'worm'. Pa. *purut*. Ga. (S) *pudut*. Go. *puri*: (pl. *purk*); *puri*:- 'to breed worms (of a foul wound)'. Kon<sup>a</sup> *pri* 'snail', *pirvu* (pl. *pirku*) 'worm'. Pe. *pri*: (pl. *priku*). Kui *priu*, *priu* (pl. *prika*), *piru* (pl. *pirka*).

<sup>4</sup>. Burrow (1968b:63) pointed out that in Kui and in the south-eastern dialect of Kon<sup>a</sup> \*l > r but \*l > l as in Parji-Gadba; on the other hand, both \*l and \*l become r in Gondi, Kuvi, Pengo and the North-Western dialect of Kon<sup>a</sup>.

Kuwi (Su.) *priyuli* (pl. *pri:ka*). Kur. *pocgo:*; *pocc-* (*puccy-*) 'to engender worms'. Malt *pocru* 'worm'; *posGo* 'weevil'. Br. *pu:*; *pulmak(k)i:* 'tapeworm'. (3537).

See also examples 2, 11, 349, 465, 605, 606, 759, 764, 777, 781, 782, 783, 785, 786, 788, 790, 792, 793, 796, 797, 799, 801, 803, 1020, 1082 and others. (In two cases, *l* combines with the following *nt* to produce *n* or *ṇt*. They are DED 3299 Ka. *paṇ* 'to become ripe, n. fruit', CDr. *panḍ-* < \**pal*-(*u*)*nt*-; cf. Tu. *parndi*; Ta. *paṇu* 'to ripen', *paṇam* 'fruit') and DED 3440 (Ka. Te. *piṇḍu* 'to squeeze out, milk', Kod. Tu. *pund-*, Kol. *piṇḍ-* < \**pili*-*nt*-, cf. Ta. *pili* (-*nt*-).

### 37.2. Tamil.

37. 2.1. In spoken Tamil, *l* is preserved in the Brahmin dialect of almost the entire area and also in many of the non-Brahmin dialects of South Arcot, Tanjore and Tiruchi districts. In most of the other dialects it merged with *l* although in the substandard dialects of Madras and the surrounding places it merged with *y*.

37. 2.2. Inscriptional evidence shows that the merged of \**l* to *t* must have started some time before the 9th century, cf. *cevva:y kiḷamai* (9th century) for *cevva:y kiḷamai* 'Tuesday' and *co:ṭa* (10th century) for *co:ta*. Moreover, *l* is written as hypercorrection for *l* in inscriptions, e.g. *na:ṭ:aḷccī* (7th century) for *na:ṭa:lccī* 'ruling the country'; *ke:ḷvi* (11th century) for *ke:lvi* 'question', *ceyva:rkaḷukku* (11th century) of *ceyva:rkaḷukku* 'to those who do'.

37. 2.3. *Tolka:ppiyam, eluttu, sutra 21* classifies *l* along with *y, r, l, v* and *l* as *iṭai(y)eḷuttu* 'sounds other than plosives and nasals'. Sutra 95 of the same chapter states that "r and

*l* are produced by the tip of the tongue being raised and allowed to gently rub against the hard palate".<sup>5</sup>

37. 2.4. In loanwords from Indo-Aryan, *l* is substituted for *d*, *s* and *r* in Tamil-Malayalam, e.g. *ulai* 'dawn' < Skt. *uṣas-*; *ce:lam* 'seṣa' < Skt. *seṣa-*; Ta. *kīya:lam*, Ma. *kaļa:-yam* 'decoction' < Skt. *kaṣa:ya-*; (also Ka.) *na:li* 'a period of 24 minutes' < Skt. *na:ḍi-*; *amītam*, 'nectar' < Skt. *amṛta-*. also cf. Ma. *kiriļi* 'work' < Skt. *krṣi*, *poļutti* 'work' < Skt. *pravṛtti*, *tando:lam* 'gladness' < Skt. *santoṣa-*; Old Ka. *da:li* 'assault' < Skt. *dha:ti:-*, *pi:lige* 'preface, seat' < Skt. *pi:ṭhika:-*.

### 37. 3. Malayalam.

37. 3.1. In Malayalam, \**l* is generally preserved in all dialects. In *-po:l* 'time' < \**po:l* in *a-ppo:l* 'then', *i-ppo:l* 'now' and *e-ppo:l* 'when' we find the change of *l>t*. In verbs *l* is lost before the past tense marker *-nn-* (in the modern language) as in *ta:nn-<\*ta:l-nn-*, past stem of *ta:l* 'to be lowered' and *va:-nn-<\*va:l-nn-*, past stem of *va:l* 'to live'.

<sup>5</sup>. *nūñina:(v)añari* (*y)añnam varuña raka:ra ḥaka:ram a:(y)iran-tum *pītakkum*. As pointed out by Ramaswami Aiyar (1935: 146), it is difficult to understand (i) why *r* and *l* should be clubbed together with regard to their manner of production. (ii) there is any "gentle rubbing" at all in the production of *l* which (as evaluated to-day in Tamil) involves no "rubbing" of the tip". *Nannus* 93 simply follows *Tolka:ppiyam* in this matter. Kesiraja's description (*Sabdamani darpaṇa*, sutra 19) of Kannada *l* that it is produced by pronouncing *d* with greater pressure is also equally vague. According to Ramaswami Aiyar (1935:145-146), Ta. Ma. *l* is "a voiced continuative produced by the passage of air through a channel (slightly broader than that for *s*) formed between the curled-up tongue-tip and the cacuminal (or sometimes post-alveolar) region of the mouth-roof. There is no contact (except for the sides of the tongue, with some speakers) with the mouth-roof..."*

## 37. 4. Kota.

37. 4.1. Proto-Dravidian \**l* has the following five correspondences in Kota: (i) *r* (retroflex one-flap tremulant), (ii) *y*, (iii) *ɸ*, (iv) *r* and (v) *l*. Of these, *r* is the most common correspondence; *y* occurs only in word-final position and therefore this must be the conditioning factor for it. PDr. \**l* is lost in Kota before *g*. In three instances it develops into *r* and in these it is followed by *l* in the next syllable. There are a large number of Kota words in which PDr. \**l* is represented by *l* but all these words can be considered as borrowings from either (modern) Tamil or Ba<sup>da</sup>ga.

37. 4.2. Ko. *r* < PDr. \**l*.

1171. Ko. *arc-* (*arc-*) '(flame) shoots up' : Ta. *alal* 'to burn'. (234)

1172. Ko. *ir(iṭy-)* 'to have sexual intercourse with': Ta. *iḷai* 'to associate very intimately'. (430)

1173. Ko. *erv-* (*erd-*) '(smoke) rises up', (*ert-*) '(to make to spring up from position' : Ta. *elu* 'to rise'. (723a)

1174. Ko. *ork-* (*orky-*) 'to embroider' : Ta. *oḷukku* 'to draw out, as gold thread'. (851)

1175. Ko. *kary-* (*kard-*) 'to be stretched, protrude', *kart-* (*karty-*) 'to make to protrude through hole' : Ta. *kaḷal* 'to protrude'. (1137)

1176. Ko. *kart* 'ass' : Ta. *kaḷutai* (1149; note Ko. *kaḷd* 'a term of abuse', l.w. < Mod. Ta.)

1177. Ko. *kartl* 'neck' : Ta. *kaḷuttu* (1151; Ko. *kidg* 'neck' given in this entry in DED with a query does not belong here).

\*1 Ko. *kart-* (*kayt-|karty-*) 'to wash (tr.; hands, face, child)' : Ta. *kaluvu* (1154; Ko. *kalv a:i* 'bathroom' l.w. < Mod. Ta.) 429

1178. Ko. *kart-* (*kayt-|karty-*) 'to wash (tr.; hands, face, child)' : Ta. *kaluvu* (1154; Ko. *kalv a:i* 'bathroom' l.w. < Mod. Ta.)

1179 (= 786). Ko. *ki:ym* (obl. *ki:rt-*) 'monsoon clouds which lie on the hills as mist' : Ta. *ki:l* 'place or space below'. (1348).

1180. Ko. (*p)ard-* ((*p)ayd-/ (*p)ardy-*) 'to tell' : ? Ta. *pa:iccū*, 'to praise, worship, tell'. (3298)*

1181. (= 799) Ko. *port* 'time, sun': *ort* 'good luck' : Ta. *polutu, po:litu, po:tu*. (3724; Ko. *pa:t* 'time' and To. *po:jid*'. given under this entry are unrelated to the other forms in it; they seem to be related to Te. *patti* 'time, occasion')

1182. Ko. *mart* 'axe' : Ta. *malu*, To. *most*. (3889)

1182a. Ko. *moyv* 'a child's continuous crying' : Ta. *mu:anku* 'to roar, thunder', *mulakku, mulakkam* ('noise'). (4092)

37. 4.3. Ko. *y.* < PDr. \**l*/— #

1183 (= 465). Ko. *e:y* (Sholur dialect *e:g* 'seven' : Ta. *e:l(u)*. (772)

1184. Ko. *kuy* 'pit' : Ta. *kuli*. (1511)

1185. Ko. *ko:y* 'fowl' : Ta. *ko:li*. (1862)

1186. Ko. *to:y* 'buffalo pen' : Ta. *to:l(am), tol(vam)* 'cattle-stall'. (2904)

1187. Ko. *pay-* (before vowel), *pa-*. (before consonant) 'old': Ta. *pala*. (3296)

1188. Ko. *paya:c* 'woman who has casual sexual intercourse': Ta. *pa:li* 'blame, fault'. (3297)

1189. Ko. *paykm* (obl. *paykt-*) 'a story' : ? Ta. *pa:iccū* 'praise, adoration'. (3298).

1190. Ko. *pa:y* (before vowel), *pa:* (before consonant) 'empty, abandoned' : Ta. *pa:l* 'desolation, ruin'. (3381)

1191. Ko. *e:r i:ʃ va:y* 'fields near village which are ploughed in the sowing ceremony' (*va:y<pa:y*); *va:yv* 'Toda *ti*: dairy' : Ta. *pa:li* 'temple, town, city'. (3383).

1192. Ko. *pey* 'river', *peyy-e:r* (obl. *peyy-e:t-*) 'id.' : Ma. *pula*. (3543)

1193. Ko. *may* 'rain' : Ta. *ma:lai*. (3893)

1194. Ko. *va:y va:n, va:g* < pre-Kota \**ya:lk*) 'plantain' : Ta. *va:lai*. (4403).

Although in most of these cases, *l* is followed by \*-i or \*-ay (pre-Kota \*-e) there are cases like examples 1183, 1186 in which this is not the case; therefore it will not be correct to include these vowels in the conditioning factor.<sup>6</sup> *ki*: 'below' < \**ki:l* (example 786) and *ku*: 'cooked rice' < \**ku:l* (1592) show loss of \**l* in final position.

37. 4.4. Ko.  $\phi$  < PDr. \**l/-g* (<\*(n)k) or *k-* (<*kk*).

1195. Ko. *ag-* (*art-*) 'to weep, cry', *agl, akl*, 'act of lamenting', *arg-* (*argy-*) '(cattle) bellow in protest' at ill-treatment : Ta. *alu* (-*t-*) 'to cry, weep', *ałunkal* 'loud noise, uproar'. (240)

1196. Ko. *u:g-* (*u:yg-*) 'to slide down a slope'; *u:k-* (*uyk-*) 'to cause to slide down a slope', *u:gan* 'pen bars, planks used to close cowshed door' : Ta. *ilukku* 'to slip, slide': (426; etymology doubtful).

<sup>6</sup>. Iru'a also shows the change \**l* > *y* before *i* and also otherwise, e.g. *kuyi* 'pit' < \**ku:l*, *ko:yi/kuyi* 'fowl' < \**ko:li* but also *koyali* / *keylu* / *ko:alu* 'flute' < \**ku:lal*. Other developments in Iru'a are *l* asin *ölu* 'to weep' < \**alu*, *ö:lu* 'seven' < \**e:l* and loss of *as* in *köt(tu)* 'neck' < \**kałuttu* (Zvelebil 1970:150).

1197. Ko. *ug-* (*urt-*) 'to plough', *ukl* 'act of ploughing', *u:v* 'one furrow in ploughing' : Tu. *ulu* (-*t*-). (592)

1198. Ko. *ug a:t-* (*a:c-*) 'to clean hair by untangling snarls, removing lice, etc' : Ta. *ulu* (-*t*-) 'to arrange or adjust (as hair with the fingers'. (593)

1199. Ko. *kig-* (*kirt-*) 'to plPck up, pull (teeth)', *kit-* (*kity-*) 'to tear with the teeth', *kiv-* (*kivd-*) 'to become torn', (*kirt-*), 'to tear' : Ta. *kili* (-*nt*-) 'to be torn', (-*tt-*) 'to tear'. (1316).

1200. Ko. *pug-* / *purv-* (*purt-*) 'to hide' : Ma. *pu:l*, *pu:n* 'to be buried, stick in the mire'. (3588)

1201. Ko. *vag-* (*vart-*) '(woman) is married'; *vakc-* (*vakc-*) 'to make woman marry' : Ta. *va:l* (-*nt*-) 'to exist, live'. (4402)

1202. Ko. *vig-* (*virt-*) 'to fall', *vi:k-* (*vi:ky-*) 'to let fall' : Ta. *vi:l* (-*nt*-), *vilu* (-*nt*-) 'to fall'. (4457)

1203. *mu:g-* (*mu:yg-*) 'to submerge oneself', *mu:k-* (*mu:yk-*) 'to submerge (tr.)' : Ta. *mułuku*, tr. *mułukku*. (4096)

*pu:< \*puł-u* (example 1170) also shows loss of \**l* with compensatory lengthening; also cf. *u:v.< \*uluv* in example 1197. *ku:v-* (*ku:d-*) 'grain gets soft' (:Ta. *kułai*. 1514) may also be from pre-Kota \**kuł-u* although the -*u* derivative is not attested in any language. From these instances it may be concluded that the sequence \**ulu* yields Ko. *u:*. But examples 1197, 1198 and 1200 go against this rule since although they show loss of \**l* there is no compensatory lengthening. Is the absence of lengthening in these due to analogy with past stems with a short vowel?

### 37. 4.5. Ko. *r* < PDr. \**l* / -*l*

There are only three instances for this and in all of them Ko. *r* is followed by *l*. They are the following.

1204. Ko. *arl* 'fever' : Ta. *alal* 'fire, flame, heat'. (234; now there is no need for the 'alternative' grouping of this word with Ta. (*ari*) 'to - have an acute sensation' 177 which was suggested in DED).

1205. Ko. *korl* 'tube' (also *kola:y* < Ka.) : Ta. *ku:lal*. (1511)

1206. Ko. *nerl* 'shade' : Ta. Ma. *nilal*. (3046)

37. 4.6. There are a number of cases with *l* for \**l* and they are all loans, cf. examples 1078 and 1105; other examples are *eld-* 'to write' < \**elutu* (725), *culy* 'whirlpool' < \**culi* (2223a), *va:l-* '(woman) lives with husband' < \**va:l* (4402), cf. also 338, 429, 587, 1145, 3296, 3542, 4096, 4330 and 4457.

### 37. 5. Toda.

37. 5.1. Emeneau (1958:51-57) gave the following reflexes

for \**l*: (i) *d*, (ii) *r*, (iii) *w*, (iv) *s*, (v) *ʂ*, (vi) *ɸ*, (vii) *y*, (viii) *g* (ix) *l* and (x) *L*. He himself has identified the words that contain *l* < \**l* as loans, see example 790 (*kwalp*); also cf. *o:lm* 'depth' (< \**a:lam*, 338), *poly* 'way' (< \**vali*; 4335). The same can be said for the few words with *L*, which must have entered Toda before the change of \**l* to *L*, e.g. *tüLy* 'deep pool' < \**culi* (2223a), see 35.3.3. *g* may not be a real correspondence since it occurs only in one case: in *kog* (*ir*) 'old (buffalo), *kog foLy* 'big dairy' at *To:lo:7* 'village', *kog* can be from \**kol(u)k-*, the velar derivative is attested in Kui (see example 790), *tog-* 'to be humbled' (2594), which is similar to the above, is a loan from Ka. *taggu* (< \**tal(u)k-*) as noted by Krishnamurti (1958b:271).

37. 5.2. *d*. As noted by Emeneau, this correspondence occurs mostly in verbs of the type (C)VV, the final V being \**i*, \**u* or \**ay*; additionally, there is one noun in which *l* is followed by \**i* (example 1215). There are nine instances.

1207. To. *öd-* (*ödθ-*) 'to rise' : Ta. *elu* (-*nt-*). (723a)

1208. To. *kody-* (*kodɔ-*) '(period of time) passes' : Ta. *kaļi* (-*nt-*). (1142)

1209. To. *kwađ-* (*kwadθ-*) 'to rot' : Ta. *kuļai* (-*nt-*) 'to become soft'. (1514)

1210. To. *tudy-* (*tuđs-*) 'to move in a circle', (*tudc-*) tr. : Ta. *cuļi* (-*nt-*); (-*tt-*) tr. (2223a)

1211. To. *pody-* (*podc-*) 'to scrape with fingers' : Ta. *vali* (-*tt-*). (4333)

1212. To. *padf-* (*pađt-*) 'to slip' : Ta. *valu* *valu* (-*tt-*), Ka. *balal*. (4336)

1213. To. *pod-* (*podθ-*) 'to be priest of *ti*: dairy' ; *podθ-* (*podθy-*) 'to enjoy' : Ta. *vaļ* (-*nt-*) 'to live'. (4402)

1214. To. *piđ-* (*piđθ-*) 'to fall, (animal) dies' : Ta. *viļu* (-*nt-*). (4457)

1215. To. *kwī:dy*, *kwī:y* (in songs; either from Ko. *koty* or Badaga *ko:i*) : Ta. Ma. Ka. *ko:li*. (1862)

37. 5.3. *r* (retroflex trill). There are only five instances and the difference in the environment between *d* and *r* is not clear; for example, why *\*viļu* > *piđ-* (example 1214) but *\*aļu* > *or-* (example 1216)

1216. To. *or-* (*ory-*) '(child) weeps' : Ta. *aļu* (-*t-*). (240)

1217. To. *ōrf-* (*ōrt-*) 'to carry, place (corpse) on fire, arouse from sleep, give (girl) in marriage, bring to life'; *ort-* (*orty-*) 'to arouse from sleep'. Phonologically and semantically these seem to be from *etu* (-*pp-*, -*tt-*) 'to take up' rather than from *etu* (-*v-*, -*nt-*) 'to rise'. (723a).

1218. To. *wirk-* (*wirky-*) 'to embroider' : Ta. *olukku* 'to draw out, as gold thread'. (851)

1219. To. *koyL* 'kite' : Ta. Ma. *kaļu(ku)*. (1147)

1220. To. *port ud-* 'to smear profusely' ; Ta. *vāli* (-*tt-*) 'to smear, scrape'. (4333; see also example (211))

37. 5.4. *w*.<sup>7</sup> It occurs in the word-final position.

1221. To. *ko:w* 'pointed stick' : Ta. *ka:l* 'iron rod, elephant goad' (1155; the Toda word is in 1146; both the entries need cross-reference);

1222. To. *maw* 'rain' : Ta. *maļai*. (3893)

1223. To. *pa:w* 'river' : Ma. *pula*. Ka. *pole*. (3543)

1224. To. *po:w* 'one variety of dairy' ; Ta. *paſli* 'temple'. (3383)

1225. To. *kwa:w* 'decayed dead body' : Ta. *ku:ļai*, *kuļai* 'soft mud'. (1514)

See also examples 11, 465, 790 and 796.

37. 5.5. <sup>v</sup>*s* and <sup>v</sup>*š*. There has been merger of \**l* with \**r* before a consonant in pre-Toda, the resultant \**r* later developed to <sup>v</sup>*s* and <sup>v</sup>*š* (Emeneau 1958: 53–54; 57). As noted by Emeneau

(1958:53), <sup>v</sup>*s* and <sup>v</sup>*š* 'are followed in the Toda form, which is a monosyllabic verb stem or a noun, by the stop *t* or *k*, or in the verb stem by *f* which alternates with *t* in the past

<sup>7.</sup> cf. Emeneau (1958:22–23): "The phoneme that has been set up as *w* is of peculiar and limited distribution. Two allophones are included in it, which seem to have in common velar friction and voicing. One has lip rounding, but little labial friction, and little friction in the velar region either, so far as was determined. It occurs after the vowels *o* and *o:*, and also before the vowels *a a: i i: e:*; preceding these vowels it occurs either initial or preceded by *n s k t ...* The other allophone of *w* has considerable voiced velar friction ([*y*]) and strong lip retraction. It occurs only after short and long vowel phones which show strong lip retraction and a raising of the back of the tongue to approximately the [*y*] position."

stem." The conditioning for the development  $*r > \overset{\circ}{s}$ ,  $\overset{\circ}{s}$  was given in 33.2. and it is almost the same even in the case of pre-Toda  $*r$  that is from  $*l$ ;  $\overset{\circ}{s}$  appears before a non-morphemic  $s$  or a front vowel (which is later lost or changes to  $y$ ). The front vowel can even be the past suffix  $*i$  ( $>$  To.  $y$ ), see examples 1232 and 1233 but 1238 is an exception. In the case of examples 1231, it cannot be said that  $\overset{\circ}{s}$  is due to the  $t$  of the secondary stem because  $\overset{\circ}{s}$  occurs before it in examples 1235 and 1236. All this shows that problems still remain and that it is not yet time to say the final word in this matter.

1226. To.  $kisf-$  ( $kist-$ ) 'to pluck out by roots, rape' : Ta.  $kili$  (-nt-) 'to be torn'; (-tt-) 'to tear'. (1316)

1227. To.  $to:st\ na:s-$  '(monsoon) comes slanting with gusts of rain and mist' ; Ma.  $ta:lttu$  'a slope'. (2597)

1228. To.  $tost$  'bar at gate of pen' ; Ma.  $talutu$  'bolt, bar'. (2598)

1229 (=799). To.  $pist$ ,  $post$  'time, luck' : Ta.  $polutu$ . (372)4

1230. To.  $most$  'axe' : Ko.  $mari$ . Ta. Ma.  $malu$ . (3889)

1231. To.  $posf-$  ( $post-$ ) 'to ripen' : Ta. Ma.  $paju$ . (3299;  
(the  $\overset{\circ}{s}$  is unexpected)

1232. To.  $mösk-$  ( $mösky-$ ) 'to smear with dung of buffaloes as a ritual purification';  $mösk$  'wax' : Ta. Ma.  $mełuku$ . (4169;

the *s* in the basic stem is due to the influence of the past stem, the noun contains *s* as expected).

1233. To. *pisk-* (*pi:sky-*) 'to kill (animal)', *pi:sk* 'sickness'

(< \**vi:lkk-*, tr. of \**vi:l* 'to fall, fall sick' (4457; the *s* in the basic stem is due to the influence of the past stem; the noun contains *s* as expected).

1234. To. *osk* 'dirty': Ta. Ma. *alukku*. (241)

1235. To. *i:sf-* (*i:st-*) 'to drag, pull' (< \**i:l*, 427 or \**ir:*, 461).

1236 (= 781). To. *usf-* (*ust-*) 'to plough': Ta. *ulu*. (592)

1237. To. *kuş* 'small valley, ditch': Ta. Ma. *or kuli* - 'pit' (1511; both loss of final \**i* and *s* are unexplainable).

1238. To. *pušk-* (*pušky-*) 'to boil (potatoes)': Ta. Ma. *pułukku*. (3540)

1239. To. *pask* 'property; household article' < \**val-ak(k)* (4402)

37. 5. 6. φ. The \**l* in the final position is in a few cases lost (see examples 1240-1242); it is lost in the medial position also in a number of cases. While there is lengthening of the preceding vowel in a few cases (see examples 1243-1248) no such lengthening occurs in the majority of the cases.

1240 (= 786). To. *ki:-* 'lower' < \**ki:l*. (1348)

1241. To. *ku:θwī:t* 'cooked rice from which water has been drained': Ta. *ku:l* 'porridge'. (1592)

1242. To. *twī:n* 'corral, pen': Ta. (*to:l(am)*). (2905)

1243. To. *ka:l-* (*ka:a-*) 'to fall from height'; tr. *ka:l-* (*ka:i-y-*): Ta. *ka:lal* 'to become lose', tr. *ka:lattu*. (1136)

1244. To. *kwe:L* 'tube, clarinet', *ku:t* 'dry pit' : Ta. *ku:lal* 'pipe'; *kuli* 'pit'. (1511)

1245. To. *ne:s* 'shade', *ne:l* 'relics' : Ta. *ni:lal*. (3046)

1246. To *pa:k-* (*pa:ky-*) 'to abuse' : Ta. *pali*. (3297)

1247. To. *i:x-* (*i:xy-*) 'to descend'; tr. *itk-* (*i:ky-*) : Ta. *ili*. (426)

1248. To. *mu:x-* (*mu:xy-*) 'to be destroyed, drown'; tr. *mu:k-* (*mu:ky-*) : Ta. *muluku*, tr. *mulukku*. (4096)

1249. To. *as* 'heat of sun or fire' : Ta. *alal*. (234)

1250. To. *wak* 'small bamboo vessel' : Ta. *ulakku* 'measure of capacity'. (587)

1251. To. *kwiz*, 'twig' : Ta. *koluntu*. (1787)

1252 (= 1170). To. *puf* 'worm' : Ta. *pu lu*. (3537)

1253. To. *muf-* (*mut-*) 'to become angry' : Ma. *mu:li* 'vexation'. (4094)

See also DED 4093.

37. 5.7. y. This occurs only in three instances (the last one is uncertain).

1254. To. *to:y-* (*to:s-*) 'to be lowered'; *t(to;c-)* 'to lower' : Ta. *ta:l*. (2597)

1255. To. *po:y* (before vowel), *po:* (before consonant) 'empty (house, village, place)' : Ta. *pail* 'to go to ruin'. (3381)

1256. To. *pa:ym* 'story of actual event' : Ta. *paliccu* 'to praise, tell'. (3298)

### 37. 6. Kodagu

37. 6.1. Emeneau (1971) has given the following rule for the Kodagu development of \**l*.

$*\underline{l}$  >  $y$  /  $a$  —  $*i$  (examples 1257–1260)  
 >  $\underline{l}$  /  $V$  —  $V$   
 >  $\phi$  / ~C (examples 1261–1263, 861, 866)

( $y$  is doubled before a vowel.)

Examples:

1257. Kod. *kay-* (*-p-*, *-c-*) ‘to remove, undo (knot)’ : Ta. *kaļi*. (1136)

1258. Kod. *kay-* (*kayyuv-*, *kayñj-*) ‘(time) passes’, (*-p-*, *-c-*) ‘to pass (time)’ : Ta. *kaļi*. (1142).

1259. Kod. *kay-* (*kayyuv-*, *kayñj-*) ‘to be possible’ : Ma. *kaļi-*. (1143)

1260. Kod. *bay po:-* ‘to wander aimlessly, *bayya* ‘behind, after’ : Ta. *vaļi* ‘way, path’. (4335)

1261. Kod. *matti* ‘axe’ : Ta. *maļu*. Ko. *mayt*. To. *most*. (3889)

1262. Kod. *pukk-* ‘to boil’ : Ta. *puļukku*. (3540)

1263. Kod. *ba:ce* ‘act of living’ : Ma. *va:ļca*. (4402)

For  $*\underline{l} > \underline{l}$ , see examples 11, 465, 785, 788, 796 and 838; note the alternation between  $\underline{l}$  and  $\phi$  (the latter before a consonant) in examples 349, 841, 842 844 and 864.  $\ddot{e}:l\ddot{i}$  ‘700’ (example 465) is analogical remaking on the basis of  $\ddot{e}:l\ddot{i}$  ‘7’.

37. 7. Kannada.

37. 7.1. In Kannada  $\underline{l}$  was preserved until about the middle of the 10th century A.D. In that period, it changed to  $\underline{l}$  in the intervocalic and final positions and to  $r$  before a consonant (A.N. Narasimhia 1941:61–62).  $r$  was later assimilated to the following consonant (the first occurrence of  $*\underline{l} > r$  was recorded in 930 A.D. and exactly a century later, i.e. in 1029 A.D. there is an instance of assimilation of  $r$ , cf. *ka:l-gacci* ‘having

washed the feet' (*gacci* < *karci* < *kałci*; so, Krishnamurti 1958b:263). Also cf. *tałgu* > *targu* > *taggu* 'to become low' (2597), *połtu* > *portu* > *pottu* > *hottu* 'sun' (example 799), *kałcu* > *karcu* > *kaccu* 'to wash' (1154), *kalte* > *katte* 'ass' (1149).

37. 7.2. In Badaga, first \*l merged with \*l and the resultant \*l split into y and l; y occurs before a front vowel including e that is from \*-ay and l occurs elsewhere (this conditioning is incomplete); e.g. *guyi* 'pit' < \**kuli* *suyi* 'whirl' < \**culi*, *ko:yi* 'fowl' < \**ko:li*, *koye-* 'to decay' < \**kulai*, *hoye* 'river' < \**pol-ay*; *aye* 'tiger's den' < \**ałay*, *huyi* 'tamarind' < \**puli*, *moye* 'shoot' < \**molay*. There are instances for the loss of \*l in final position: *ku:* < \**ku:l* 'cooked rice', *to:* 'cattle pen' < \**to:l*.

### 37. 8. Tuļu.

37. 8.1. In Tuļu \*l develops to l in the Brahmin dialect and to r in the common dialect, e.g. *ko:li* / *ko:ri* 'fowl' (1862) *guli/guri* 'pit' (788), *pala/para* 'old' (796), *ule/ure* 'deer' (783) *gałpu/garpu-* 'to dig', *pułi/puri* 'worm' (example 1170), *połtu/portu* 'time' (example 799); *pulñgu/purñgu* 'civet cat' (3538). Even the Brahmin dialect (of some localities perhaps) shows r before a consonant, e.g. *parndi* 'fruit' (3299), *portu* 'sun', *urdu* 'black gram' (594); these instances were given by Krishnamurti (1958b:272). Krishnamurti's conclusion (*loc. cit.*) that all forms with l are loans from Kannada is untenable; even to think of influence of Kannada in this respect is unnecessary since \*l > l occurs also in later Tamil and Kodagu (for this view, cf. Burrow 1968b:62).

### 37. 9 Telugu.

37. 9.1. In the Telugu inscriptions, l was preserved till the middle of the 9th century A.D., e.g. *pałaki/płakki* > *parkki* 'name of district', *kłocce* 'the engraved', *pulo:la* > *pro:lan*

in the city', *laccu* 'to destroy', *lendulu:ra* 'at Dendulur', *lulla* 'place name (mod.) *lolla*'. Later, it merged with *r* after a (word-initial) consonant (it came to this and the word initial positions through metathesis, see Chapter 16) and with *d* in other positions, i.e. word initial, medial and final positions (the enunciative *u* follows it in the final position). For *r*, see examples 786, 788, 790, 792, 796, 799, 801, 803; for *d*, see examples 465, 777, 785, 786 (*ki:du*), also *sudi* 'whirl pool' < \**cuļi* (2223a).

Word-initial *d* is optionally replaced by *d* in the literary period itself; see examples 781, 782, 783,<sup>8</sup> 777.

The *r* in word initial clusters has been dropped in modern Telugu. (Old *vra:yu* > Mod. *ra:yu* 'to write' (< \**varay*, 4304) in which *v* rather than *r* is dropped is the sole exception to this statement). *purugu* in example 1170 exceptionally shows \**l* > *r* in the medial position.

37. 9.2. There are a few words with *l* for \**l* which are loans, e.g. *ati:va:ru* (< Ta.) 'a *vaiśavite* saint', *ta:lamu* 'bolt, latch' (< Ka; Ta. Ma. Old Ka. *ta:l*, 2598), *co:la* 'name of a royal dynasty' (< Ta. or Ka; cf. Ta. *coļa*).

37. 9.3. The following words show *n* for \**l*, they could be loans from Kannada which exceptionally shows *n* in these cases: *genusu* 'sweet potato' (: Ka. *genasu*, *geļasu*, Ta. *kilañku*, 1314); *punugu* 'civet' (: Ka. *pupugu*, Ta. Ma. *puluku*, 3538).

### 37. 10. Kuṛux-Malto.

37. 10.1. The development of \**l* in Kuṛux-Malto was treated in detail by Burrow (1968b). Pfeiffer (1972:156–157) also dealt with this problem with regard to Kuṛux. Burrow concluded that the normal correspondence of \**l* in Kuṛux-Malto is *ɸ* (i.e. loss) and that the statement in the preface to *DED* (pp.

<sup>8</sup>. In these three cases *d-* forms are not attested but Kol. Ga. *duppi* seems to be a loan from Telugu when it had *d* in this word; metathesis does not operate in these languages,

xii-xiii) that *s* is the Kurux-Malto reflex of \**l* cannot be correct. He listed the following apparent treatments:

1. -*s-*, -*ss-* (5 items; examples 1273, 1274, 1278, DED 4489)
2. -*c-*, -*cc-* (3 items; examples 1273, 1275, 1276)
3. -*y-* (2 items; examples 781, 1266)
4. -*g-* (1 item; example 781)
5. -*r-* (5 items; examples 1267, 1277, 1279)
6. -*d-*, -*dd-* (1 item; example 1267)
7. -*r-*, -*rr-* (2 items; example 605, S 570)
8. -*l-* (3 items; examples 1267, 1269, 1281)
9. -*n-* (2 items; examples 1280, 1281)
10. loss (16 items, examples 1264-1272)

He concluded that since  $\phi$  is the most common correspondence in unambiguous cases, it must be the real correspondence even in cases where -*s-*, -*ss-*, -*c-* or -*cc-* appears to be the correspondence. The latter sounds are part of the derivative suffix. In most of these cases, the palatal, in fact, appears as a derivative suffix after *l* in one or the other of the sister languages.

*y* and especially *g* (which occur in isolated cases) can also be eliminated as correspondences with the same explanation but Burrow preferred to consider them as correspondences on the basis of similar developments in dialectal Tamil, Toda-Kota and Naiki for *y* and in Kota for *g* (note that it was shown above in 37. 4.4. that *g* is not a real correspondence of \**l* in Kota.). *l* is from \**l* and *n* is from \**n* and alternation between \**l* and these sounds in these cases goes back to the Proto-Dravidian stage. Then, apart from  $\phi$ , the other correspondences of \**l* in Kurux are *r*, *d* and *r*.

37. 10. 2. The conditioning factors for these four developments cannot be given because of the meagreness of the material. In cases where we find  $\phi$ , Pfeiffer posits the intermediary,

stage \*y for pre-Kurux because \*y is also lost in Kurux but this seems to be unnecessary.

1264. Kur. Malt. *ej-* (*ejj-*) 'to rouse from sleep; *ejr-* 'to be awake' : Ta. *eļu* 'to rise' (723a, Proto-Kur.-Malt. \**eļ-c-*).

1265. Kur. Malt. *o:j-* 'to spin, twist' : Ta. *oļukku*. (851)

1266 (= 786). Kur. *kiyya:* 'beneath', *ki:ta:*, *kiyyanta:*, 'lower'; *ki:tanta:* 'low-born' < \**ki:l-*. (1348)

1267. Kur. *nur-* (*nudd-*) 'to hide'; *nu:xr-* 'to hide oneself' *nulug-* 'to insert'. Malt. *nud-* 'to hide'; *lulq-* 'to thrust in': Ta. *nuļai* 'to creep through, get into'. (3076).

1268. Kur. *pā:n-* 'to ripen', *panjka:* 'fruits'. Malt. *pa:n-* *panjek(e)* 'ripe' < \**pal-an/-anc-*. (3299)

1269. Kur. *bi:n-* 'to milk' ?: Malt. *pilq-* 'to squeeze'. Ta. *pili* 'to squeeze'. (3440)

1270. Kur. *mu:ka:* 'knee, elbow'. Malt. *mu:ke* 'knee' < \**muļaň ka:l* 'knee', *muļaň kai* 'elbow'. (4093)

1271 (= 1082). Kur. *meddo:* 'brain'. Malt. *medo* < \**metal*. (4153)

1272. Kur. *pu:x-* 'to boil'. Malt. *pu:G-* : Ta. *puļunku*. (3540).

1273. Kur. *i:c-* 'to draw out'; *i:c-/i:s-* 'to pluck'. Malt. *i:c-* 'to take off' : Ta. *iļu* 'to pull'. Te. *i:d(u)cu*. (427)

1274. Kur. *xoss-* 'to become weak or soft' : Ka. *koļaci*, *koļace* 'state of being putrid'; *kocce* 'mud'. (1514)

1275 (= 796), Kur. *pacca:* 'old', *pacc-* 'to grow old'. Malt. *pace* 'old'; *pac-* 'to become old': Ka. *paļasu* 'to become old, worn out'. (3296)

1276 (= 1170). Kur. *pocgo:* 'worm', Malt. *pocru* : Ka. *pulicil* 'rottenness'. Te. *pruccu* 'to rot'. (3537)

1277. Kur. *purag-* 'to talk against one' : Ta. *paļi*. (3297)

1278. Kur. *pe:s-* 'to command'. Malt. *perq-* 'to talk' : Ka. *pe:l.* (3629)

1279. Kur. *maṛx-* 'to get dirty'. Malt. *maṛGr-* 'to become black' : Ta. *maļuku, maļuňku.* (3890)

1280. Kur. *munx-* 'to devour' : Ta. *mīlunku, muļunku, viļunku.* (3985)

1281. Kur. *mulux-, munux-* 'to sink', Malt. *mulG-* 'to dip in': Ta. *muļuku.* Ka. *muņugu.* Te. *munūgu, mulugu.* (4096; \*y/\*l/\*n alternation in this is widespread).

### 37. 11. Brahui.

37. 11.1. The reflexes of \*l in Brahui are *r, rr, r̥, φ* and *d* (the last one is uncertain; Emeneau 1971: 184–185); Emeneau (1980) adds *l* and *L* also as reflexes of \*l. With the limited material at hand, it is impossible to find out the conditioning factors for these developments although it can be said that the loss occurs in the pre-consonantal and word-final positions. Emeneau has shown that in Brahui \*l and \*r fell together completely as did \*r and \*f and that there is partial overlap in the development of the original reflexes (probably \*r and \*r̥ respectively) of the two pairs at a later stage.

(i) Br. *r < \*l* (6 items)

1282. Br. *mir-* 'to plaster' < \*mel-. (4169)

See also examples 349 (*arf-*), 786 (*ke:raG*), 821, 823 and 826.

(ii) Br. *rr < \*l* (2 items; see examples 605 and 788, also cf. DED 929).

(iii) Br. *φ < \*l* (4 items)

1283. Br. *tamm-* 'to fall' : Kur. *tamm-* 'to cease' < \*ta:l-/tal-V-. (2597)

See also examples 349 (*e:f*), 786 (*ki-*, *ki:-*, *ket-*) and 1170

(iv) Br. *r* < \**l* (3 items)

1284. Br. *pe:r-* 'to roll around' : Te. *pedu*, *pe:nu*. (3423a)

1285. Br. *bi:r-* 'to milk' < \**vi:l-*. (3440b)

1286. Br. *dar-*, *daring*, *darang-* 'to get down, descend' < \**ta:l-/ta:l-V-*. (2597)

(v) Br. *d* < \**l* (one item i.e. DED 3545)

This is uncertain because Br. *pil* 'belly, stomach' is close to Go. *pi:r* 'stomach' which latter looks to \**pi:t* but not \**pi:l*. The words in the rest of the languages in this entry yield the reconstruction \**pil-* and mean 'intestines' rather than 'stomach'. It seems to be necessary to separate the Gondi and Brahui words from the rest; see also Subrahmanyam (1973:144f).

(vi) Br. *l*, *L* < \**l* (3 items)

1287. Br. *piL-* 'to squeeze' < \**pil-* (3437, 3440).

1288. Br. *maL* 'son' : Ta. *malä* 'youth'. (The Brahui item should be shifted from 3768 to 3887)

Note also Br. *pul-mak(k)i:* in example 1170 (*mak(k)i:* < Persian).

### 37. 12. Apparent alternation of \**l* with \**c*, \**l*, \**t* and \**r*.

37.12.1. Krishnamurti (1958b:280-282) has pointed out a number of cases in which \**l* seems to alternate with \**c* along with few cases each for the apparent alternations \**l*/*l*, \**l*/*t* and \**l*/*r*. Examples for the latter alternations are DED 4096 (Ta. *muluku* 'to bathe', Te. *mulugu*; Kur. *mulux-*); DED 1862 & 1768 (Ta. *ko:li* 'fowl', Konda *koṭu*); DED 4093 (Ta. *mulam* 'cubit', Te. *mu:ra*). He concluded that the alternations other than \**l*/*c*, which occur in a minority of cases,

can be explained by taking the concerned consonants as derivatives rather than part of the root at the level of inner derivation, that is at a very early stage. As regards \*l/\*c, he felt that the cases are too many to be accounted in that way. But in most of these, only the north Dravidian languages have the \*c variant and Burrow argued that in such cases the real reflex of \*l is  $\phi$  and \*c is only a derivative (see 37.10.). Once we remove such cases from consideration, the number of cases that show the \*l/\*c alternation will also diminish and this makes the reconstruction of a third phoneme to account for this alternation (suggested by Krishnamurti) less plausible. Two other points that are relevant in this connection are the following. First, there is no phonetic closeness between these two sounds, and second, loss of \*l in pre-consonantal position is a widespread phenomenon. Therefore, it is better to explain the cases where there is \*l/\*c variation (at the surface level) even outside Kuruk-Malto as due to loss of \*l before the derivative \*c. Examples: DED 1782 (Ta. *koli* 'to sift', To. *kwic-*, Ka. *koccu*, Go. *koss-*); DED 3890 (Ta. *małuku* 'to become blunt', *małunku* (>*mańku*) & DED 3778 (Ta. *macańku* 'to become dull') & DED 3918 (Ta. *ma*: 'black'; *ma:cu*, *ma:ci* 'cloud') & DED 3927 (Ta. *ma:cu* 'stain'); DED 3629 (Ta. Ma. *pe:cu* 'to speak'; Ka. *pe;l*); DED 2257 (Ta. *cu:l* 'to consider, know', Tu. *tu:pu-* 'to see'; Te. *cu:cu* (*cu:du* before imperative and -a) 'to see').

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